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ABSTRACT

The five chapters of this report describe the development of a descriptive model of writing instruction in grades three through six. Data reported came from a study that included observations of 160 classes of writing instruction in eight classrooms throughout one school year. Following the first two chapters, which offer an overview of the study and its design, the remaining chapters describe (1) the constraints on writing instruction by forces outside the classroom, (2) the components of the developed model and the patterns of teaching behavior that were derived by using it, and (3) the potential for using progressive coding of student and teacher activity during a writing lesson to design more effective writing instruction. Appendixes include observation schedules and writing assignments, a curriculum for writing instruction for grades three through six, an annotated bibliography of writing instruction in the elementary schools, and further details about study results and instrumentation. (AEA)

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Writing Instruction in the Elementary Grades:
Deriving a Model by Collaborative Research

by

A. D. Van Nostrand, Joan Pettigrew, and Robert A. Shaw

Center for Research in Writing

1980

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Executive Summary

This study developed a descriptive model of writing instruction in grades three through six which accounts for both the characteristics and the variations of this instructional process. Grounded in the situations that define writing instruction, this model was derived by naturalistic observation in eight classrooms in Rhode Island throughout one school year. Fifteen observers, including eight teachers, progressively coded the observed data and tested the coding system for its validity and reliability. The report of this study also describes the institutional context within which the instruction occurred.

Since this study was intended to map a territory for future research, we conducted various correlation studies, using the profiles of the instructional model, the analytic assessment of the students' writing, the teachers' plans as represented in their daily logs, a set of characteristics of the student population, and the students' comments about writing. We also analyzed the writing assignments to which students responded. Correlation studies of these various data yielded findings which indicated directions for future research. The research tasks would be directed toward refining the components of a planning system to support the classroom teacher. All of these tasks could be performed by teachers, administrators, and research specialists

working in collaboration.

The more prominent features of this descriptive study are briefly cited in five sections of this summary. They include (1) the rationale of the study, (2) its research design, (3) the environmental constraints on writing instruction in this setting, (4) the constants and variables of the instructional model derived by the research team, (5) a classification of other findings and some indication of new research tasks that might be relevant to these findings.

Rationale

In order to achieve the purpose of this exploratory study, the research team engaged in collaborative, naturalistic observation. The lack of any historical research base addressed to writing instruction necessitated this decision. In the absence of any such base, the generation of hypotheses to be tested later would have been of questionable value. Such hypotheses require closures which might have caused us to reject valuable data prematurely. We began, therefore, with no hypotheses to prove or to disprove. Instead, we addressed three leading questions: What is writing instruction in the elementary schools? What forces directly influence this writing instruction? And how can collaborative research be used to define effective writing instruction?

As these questions indicate, we wanted to test a mode of inquiry as well as the information that it might yield. With no hypotheses and no reason to treat teachers as subjects, we were able to create a research design that ensured each team member an equal and significant role in gathering and interpreting data. By engaging each other as peers, we could all gain access to information previously unavailable to any of us.

Research Design

The team consisted of eight teachers representing grades three through six and also acting as non-participant observers in one another's classrooms; five other non-participant observers, who were teachers or researchers or, in some cases, both; the principal investigator; a consultant from the Rhode Island Department of Education, a project coordinator; and four research assistants designated to special tasks. Our primary task was to test a set of procedures by which teachers, researchers, and administrators could precisely describe and classify the components of writing instruction. We intended to derive a model that would be conceptually simple and valid, that would also accommodate inter-rater reliability and yield data from which guidelines for future research might be inferred.

The observers' classroom notes constituted our primary source of data, which was augmented by information derived from bi-weekly conferences. Together, the primary data in the observers' records and the derivative data in the minutes of these conferences comprised an observation corpus which was our major source of information. In order to audit the information corpus and to provide opportunities for comparison, we gathered information from various other sources which fall unevenly into four categories.

The most extensive category pertains to the eight teachers on the team. In addition to being the source of the primary, observed information, they were also the source of derived information by reason of their commentary on every aspect of what we observed in their classrooms. The various kinds of data that they provided were highly evident throughout our study, and to categorize them is tantamount to writing this report. Essentially, the teachers provided data as observers and observed, as respondents to questionnaires, as authors of writing assignments, and as diarists of their own teaching.

A second category of information pertains to the institutional context within which these eight teachers worked. The sources of data subsumed into this category were the legislative and administrative records which inform teaching procedures, as well as the instructional materials which the teachers used. The other two categories of data pertained to the students and to their writing. Information from these sources supplies the categorical bases for most of our correlation studies involving the observation corpus.

Environmental Constraints

As we began to assemble information during the year, we realized that the contextual constraints of an institutional nature were formidable and far more limiting than the teachers first perceived them to be. Each of these teachers taught in a deterministic environment. Factors external to their classrooms determined virtually every aspect of the time and space within which they worked. Mandates from various levels in the administrative hierarchy, disbursement of funds, the placement and grouping of students, and institutionalized tests and textbook materials all circumscribed a concept of writing for teachers to address, without specifying the means of addressing it. In such an environment a teacher's goals and intentions characteristically represent an attempt to accommodate these external forces in one way or another: to take useful advantage of them wherever possible or otherwise to minimize their effects. On the other hand, the constraints presumably associated with the student populations never materialized statistically. More important, the teachers on the team never did regard the characteristics of students as limiting to writing instruction.

The Instructional Model

Although the limits of our data base preclude a generalized answer to the question--"What is writing instruction?"--our study describes a means of providing such an answer. From a limited setting we derived a model of writing instruction that is stable enough to be tested by more writing instruction in many other settings. Writing instruction is bewilderingly complex, and this model addresses that complexity; it is comprised of a set of constants and a set of variables that accommodate an estimable range of behavior. Developed throughout ten observation cycles in one school year, the model is based on the description of 160 classes of writing instruction in eight classrooms, as recorded by thirteen observers.

Through a procedure of progressive coding, the observers described kinds of instructional behavior, adjusted the descriptions to fit this behavior, then tested them against more observed behavior. By this procedure we slowly evolved successive versions of a model of writing instruction. Each version, tested by more observed behavior, became the basis for the next; each generation of codes delineated the instructional process more precisely. This progressive coding continued until the observed components of writing instruction were stable enough to sustain reliable observation.

Through this process we observed the basic unit of writing instruction in these classes to be the writing lesson. The writing task sets the boundaries of a writing lesson, but is of little use in describing the lesson. Rather, according to our observational data, a writing lesson is delineated by activities in which teacher and students engage. Each lesson consists of some subset of nine activities. Specifically, it is a given sequence of activities, which may include some repeated activities. These nine activities are (1) presenting (information),

(2) giving instructions, (3) orienting, (4) reviewing, (5) writing, (6) rewriting, (7) sharing writing, (8) evaluating, and (9) editing.

These activities are the constants of this descriptive model. In any given lesson, however, each activity is modified by three kinds of variables: its duration, its order in a sequence of the other activities, and those modal characteristics which determine its precise nature. Even if two lessons were comprised of the same activities extending over the same span of time (a phenomenon which we never observed), they would still be distinguishable by any one of these variables.

The complexity delineated by this profile's activities and characteristics is systematic, not random; its ordering principal is that writing instruction is recursive; i.e., specified activities recur in different circumstances until a given condition is met. The teacher makes decisions throughout a lesson, but there is more to this recurrence than merely repetition. Decision-making recurs indefinitely until a specified condition is met; the instructional process is recursive, like a structured loop in a computer program. Such recursion results from a continuous interaction between teacher and student. There is a compelling reason for writing instruction to be characterized by such a high level of interaction between students and teacher. The instructional effort is recursive because the process of writing is recursive. The teacher's decisions about how and when to interact are necessarily responsive to this process, which happens to be at a different stage of occurrence for each student at any given time.

After testing this model across the curriculum, we concluded that writing instruction is significantly different from instruction in other subjects, and this conclusion suggests a simple line of reasoning: models of effective teaching in other subjects are not appropriate for writing instruction; any systematic improvement in writing instruction must evolve from the context of writing instruction; the design for such improvement should be based on what teachers actually do and framed in terms of how they perceive what they do.

Toward the Design of Effective Writing Instruction

The final question that we raised--How can collaborative research be used to design effective writing instruction?--implies that "effectiveness" can be validly defined, that the design task is feasible, and that collaborative research has a role in the achievement of this task. Our findings confirm these implications, along with some others that our study has generated, in a context of research that lies ahead.

Effective writing instruction can be operationally defined in terms of the teacher's decision-making process in the classroom, based on a tactical urgency to facilitate any given student's composing. Effective writing instruction is the teacher's consistent interaction with the students at all points of response so as to yield optimal outcome at each point; the outcome will be some aspect of the student's learning behavior. This tactical urgency, however, cannot be consistently accommodated--that is, the teaching process will probably not be effective--merely by the teacher working intuitively. Some comprehensive support system is needed to furnish reference positions to guide the teacher's rapid changes from one point to another; as long as those changes are ad hoc in nature, the effectiveness of the teaching will remain in doubt.

The model of writing instruction derived from this study may be a useful guide to the design of such a support system, but it is not definitive. It can, and should, sustain further testing; in particular, each of the nine activities could bear scrutiny by further progressive coding. With further observations in a different setting, a team of teachers and researchers might determine the rationale of each activity (its purpose and function), its desired outcome, and ways of measuring that outcome.

The patterns that we derived from the error analysis of student prose also indicate some directions for research, One element in the design of effective writing instruction is a scope and sequence for long-range planning. We analyzed the writing outcome of the students in this study for patterns that might pertain to this element. And we had in mind a series of leading questions. Does writing instruction need to be a continuum of repeated reviews for each student? What are the growth factors that might determine or modify a curriculum? When is the writer ready to learn to use new constraints? Which ones can the students be expected to master, and at what stage? Which ones will require reviewing in the long-range scheme?

The variance among patterns is rich with possibilities for researchers interested in developing a scope and sequence based on writing constraints, but it also makes the analytic assessment of writing vulnerable to misinterpretations with serious consequences. One such misinterpretation would be to view errors consistently in a negative way. Might not such errors indicate that the student is attempting a new structure, one which has yet to be learned? Another such misinterpretation would be the summative evaluation of a teacher based on errors in the students' written texts. As tempting as it might be, such a judgment would be simplistic; it would imply that error frequency in a group of texts is a precise measure of instructional quality, which, our study indicates, it is not.

Part of this study consisted of an analysis of the writing tasks assigned by the teachers throughout the year. The teachers separately assigned these tasks according to their own instructional goals and schedules. This informal set of assignments consisted largely of writer-oriented tasks in grades three and four and more reader-oriented and text-oriented tasks in grades five and six. As a function of these modes, the assignments made increasingly difficult conceptual demands on the writers as grade levels increased.

A different set of tasks entailed our identifying several kinds of student characteristics and juxtaposing them with the writing outcome. We identified five characteristics for this procedure: a student's grade level, socioeconomic status, gender, scores in reading and in mathematics, and also writing at home. This section of our findings reports the correspondences that we discovered. Significantly, the derived data support the teachers' insights about the efforts of these various characteristics on writing ability. As they insisted, grade level is either unrelated to writing outcome or related so imprecisely that it appears to be of little use in developing a scope and sequence for progressive control over the constraints on the writing process.

Socioeconomic status and gender also appear to have little effect on students' abilities. The three other characteristics, however, were significantly related to changes in the error patterns of the writing outcome. One characteristic is ability in reading, another is ability in mathematics, and the third is writing at home. But these correspondences are qualified. The first two correspondences, between writing outcome and reading or math ability, as the teachers also insisted, need not be a fixed determinant, since these abilities are subject to modification. The third correspondence, between writing outcome and writing at home, reveals a relationship but no clear direction of causality. Which one influences the other?

Finally, our findings indicate the feasibility of basing instructional plans on students as individuals rather than on groups of students. And the profiles derived from the instructional model indicate that the teacher's tactical planning--typically based on the needs of individual students--often preempts prior plans. If any prior planning is to engender effective instruction, therefore, it would appear that such planning must accommodate the teacher's tactical situation--and not the other way around.

Chapter One

The Need for a Common Language: Some Indicative Questions

Received opinion in the education community holds that most children learn how to write in school and that their learning depends primarily on the effectiveness of the instruction they receive. But effective writing instruction is an ideal, some presumable quality of writing instruction, and it will remain merely that until writing instruction itself can be defined. This report addresses the necessary first task of definition: a description of what constitutes writing instruction in a given setting as observed over an extended period of time. In a practical sense the elementary grades make an appropriate setting for this first task. Focusing on the early grades makes especially good sense in view of Donald Graves's findings for the Ford Foundation. Graves (1978) observes, "Of all the school years, K-12, the most writing was conducted in the primary years, and proportionately declined with each successive grade level" (p. 638). We addressed this task in this setting, therefore, hoping that whatever we might find would make some early and substantial contribution to the present state of the art of writing instruction.

We began our search for a definition with the premise that attempts to assess writing instruction have not yet been successful. Richard Larson (1979) has confirmed this point in a working paper for the Conference on College Composition and Communication from its committee on teacher evaluation. Larson categorizes the five basic ways in which writing instructors are generally evaluated: (1) observation of classes, (2) inspection of students' comments, (3) inspection of a teacher's assignments, (4) self-evaluation by the teacher, and (5) examination of the writing outcome; and he explains how each of these procedures is currently defective or inadequate. Moreover, little progress has been made in developing the knowledge necessary to implement such evaluation. According to Larson, "there is not even a body of research literature looking to the development of such knowledge" (p. 4).

Both scholars and teachers are likely resources in the quest for a means of evaluating writing instruction, but not through their separate efforts. We might assume, for example, that scholars would contribute a valid, precise, and comprehensive definition of writing, so that teachers might at least know the domain of the subject. But the findings of current research in composition theory make such an assumption questionable, notwithstanding the intensive effort that scholars have committed to the components of such a definition. Aware of the "writing crisis" long before it became newsworthy in the early 1970's, composition theorists have produced confounding hypotheses; uneven in the aggregate, their hypotheses increase rather than decrease the gap between theory and practice. Some years before the appearance of Newsweek's cover story, "Why Johnny Can't Write" (Shiels, 1975), several scholars, including Parke (1961), Braddock et al. (1963), and Meckel (1963), had already proposed the need for extensive study of writing behavior. Reviewing research in writing and writing instruction, Braddock cited five methodological studies with "intrinsic merits and interest," (p. 56), which could serve as points of departure for continuing research. The current state of the art can be assessed in respect to that survey of scholarship, especially to its confident tone. The editors affirmed the feasibility of designing related research projects, and they confidently expected that such research would significantly affect writing instruction and writing achievement.

But now, seventeen years later, after intensive personal and institutional effort and despite prodigious publication, the scholarship about writing and writing instruction is fragmented, contradictory, parochial, often arbitrary, and generally alien to the teachers whose task it is to teach writing. In their anthology of research in composition, Cooper and Odell (1978) call attention to their own radically different assessment of the situation. The studies included in their volume promise no controlling knowledge of writing as either a product or a process, and the editors compound one's reservations about the state of the art, offering merely the possibility of finding ways "to lift ourselves out of our own ignorance" (p. xiii). Cooper and Odell convey an acute sense of unfinished business.

Scholars in composition theory are trying to explain phenomena that are not usually measurable, so they must necessarily generate hypotheses. To help describe the expansive and centrifugal nature of their efforts, it is useful to refer to a basic paradigm for building theories by stages: (1) classify information; (2) derive hypotheses pertinent to the categories; (3) test these hypotheses against new information and (4) revise and refine them; finally (5) relate the hypotheses to each other within superordinate categories. These five stages of information processing help one to summarize the state of the art. The research efforts in composition theory are generally limited to the first two stages: classifying information and deriving hypotheses. In general, no clear relationship has been established among the many arbitrary categories and multifarious hypotheses currently proposed by scholars.

As Gage (1964) has observed, the state of the art of composition theory is "preparadigmatic." The contents of every NCTE periodical attest to this. The exchange of information among scholars and teachers suggests the logic of the classified section of a newspaper, where help wanted and services offered rarely intersect. Occasional bibliographies and various efforts at taxonomy have been immensely helpful during the past five years, but they tend to be momentary stays against confusion.

For the classroom teacher the incoherence of this scholarship lies particularly in the first stage of the research paradigm, the categorizing of information: specifically, in the abundant revision of extant classifications and the abrupt appearance of new ones. Scholars record and describe information about the writing process in dozens of porous categories. The most frequent groupings of information in current usage are probably "invention," "stages of writing," "revision," "audience," "modes of discourse," and "evaluation." The expansive dynamism of the scholarship in general can be observed in the usage of any one of these categories.

Consider, for example, the concept of "stages of writing." These stages were first delineated by Rohman (1965), who conceived of pre-writing, writing, and rewriting. Rohman's stages, however, cannot be equated with those that Britton (1975) called "preparation," "incubation," and "articulation," which he later changed to "conception," "incubation," and "production" (1978); nor are they similar to those which Murray (1978) refers to as "prevision," "vision," and "revision." Some earlier classifications implied that stages of writing are discrete, but this premise has been challenged by Peter Elbow (1973), who proposed that the writer invents as well as revises in cyclical patterns throughout the writing process, and by Murray (1978), Nold (1977) and Sommers (1978), who hold that revision occurs within each of Rohman's categories. The entire concept of discrete stages of a process has been totally modified through successive qualifications which redefine this process as being recursive. How should the teacher address this dilemma of conflicting hypotheses?

Another familiar category of information about writing is "modes of discourse," and the dissonant classifications of this concept offer another example of hypotheses that are continually being amended and qualified. Commonly designated as narration, description, exposition, and logical argumentation, these modes focused on writing as a product. Then came substantial changes. Moffett (1968) defined them in terms of degrees of abstractness as well as measures of distance between writer and audience. Kinneavy (1971) refined their rhetorical value to accommodate the various purposes of discourse. Both Emig (1971) and Britton (1975) reformulated these modes to accommodate an emphasis on writing as process, but their reformulations differ from each other. Faced with these uneven, disparate views, how should the teacher explain the modes of discourse?

The domain of composition theory has been increasing, and the manifold hypotheses about ill-defined categories of information have been derived from many disciplines, including logic, general linguistics, psycholinguistics, sociolinguistics, cognitive-developmental psychology, information theory, artificial intelligence, and semiotics. Researchers tend to celebrate this dynamism. As Barritt and Kroll observe (1978) in their comments on cognitive-developmental psychology, "at present, the best course for research in composing is probably eclectic: choosing from a diversity of methods and combining various research paradigms " (p. 57).

The classroom teacher may readily sympathize with King's plea (1978) for a theory to describe the state of the art or agree with de Beaugrande's observation (1978) that "a discipline which refuses to focus upon the totality of language use is unlikely to contribute directly to the development of a program for teaching people to use language better " (p. 135). Indeed, the development of such a program seems improbable. Composition theorists take it for granted that they must build new categories in order to present their interpretations of composing (Britton, 1975). More to the point, they even invite other scholars to build new category systems (Emig, 1978). This proliferation of categories is a useful heuristic for theorists, but how does it affect writing instructors?

John Mellon (1977) sternly answers this question: "We have no theories of teaching. Hunches and hypotheses are not theories. Last semester's successful lesson plans are not theories. Observations of externalized behaviors of persons engaged in composing are not theories. Statistical tabulations of syntactic structures are not theories. The classroom practice of professional writers turned teachers is not a theory. Even the most ingenious schemes for categorizing the spectrum of discourse. . . are not instructional theories" (p. 2). Reviewing the instructional materials that have resulted from composition research, Mellon is pessimistic. They reveal the "influence of faddishness, nearsightedness, vulnerability to the hard educational sell coupled with a naive belief in simple solutions, and often a tendency to post with unseemly haste to commercial publication" (pp. 3-4).

What is the relationship between researchers and teachers of writing? Researchers are aware that current scholarship has not filtered into classroom practice. Attempting to explain why this is so, however, they generally do not mention the myriad hypotheses and the confusion of uneven statements about composing which dedicated teachers must supposedly sift through. Instead, trying to account for the gap between research and practice, they typically focus on the teacher, emphasizing what is wrong-headed about current practice. Giroux (1978) summarizes what he perceives to be generalized attitudes; he describes three kinds of conventional assumptions that teachers make, which are variously at odds with contemporary scholarship and which hamper writing instruction. He calls them technocratic, mimetic, and romantic, and he observes that they all nurture misguided notions of writing. The technocratic assumption leads to strict emphasis on rules and exhortations. The mimetic assumption leads to a mode of instruction in which students read models of good writing and then supposedly imitate these models. The romantic assumption accomodates a need to make the student "feel good" about writing, engendering an affective response to writing at the expense of understanding its essentially cognitive nature.

The technocratic emphasis that Giroux refers to reflects a whole system of instruction which Young (1978) calls the "current traditional paradigm," and which he characterizes in this manner: "the emphasis on the composed product rather than the composing process; the analysis of discourse into words, sentences, and paragraphs; the classification of discourse into description, narration, exposition, and argument; the strong concern with usage (syntax, spelling, punctuation) and with style (economy, clarity, emphasis); the preoccupation with the informal essay and the research paper; and so on" (p. 31). Despite the insistence of contemporary theorists that these assumptions are simply not founded on what we now know about writing, Young implies, the paradigm nevertheless prevails.

Like Young, most scholars who address this subject assume that a problem exists, but they identify the problem differently. According to Stewart (1978), teachers employ outdated theories because "composition research and teaching have not been considered intellectually respectable... " (p. 175). According to Brown (1975), teachers are caught up in their own academic systems and, therefore, encourage their students to write "safe," boring essays. According to Graves (1975), teachers present writing as a form of punishment rather than as an active expression of ideas and feelings. According to Emig (1977),the teaching of writing in elementary and secondary schools negatively affects the students' attitudes toward writing. The authors of these articles characteristically assume that teachers must change what they are doing if writing instruction is to improve.

The need for change is defensible. Proposing any given change may or may not be sound, but, in any case, unless there is clear indication of how to manage such change, the proposal is useless. And if an explanation represents some hypothesis of the observer, it is likely to sound patronizing: teachers should encourage students to write things that are enjoyable to read (Brown, 1975); teachers should teach writing as an interdisciplinary endeavor (Fox, 1976); teachers should help the students establish a high degree of comfort with the writing task (Hipple, 1975); and so on.

Some projects involving teachers in empirical research on writing instruction have been fruitful; others have not. In any case, documenting an opinion about why writing instruction is inadequate, especially if such documentation indicts teachers, is not likely to engage teachers in open exchange with researchers.

The inadequacy of teacher preparation is commonly cited among descriptions of present writing instruction, posing the question of what to do about it. Master (1978) notes that teachers in general have not been trained to write, that secondary school teachers of English have been trained in literature rather than writing, and that "elementary school teachers frequently do not even have the background knowledge of literature which might enable them to respond to the written word" (p. 597). And Graves (1978) documents a startling lack of any institutional measures to redress this situation by formal training. "In a random survey of 36 universities, we found that 169 courses were offered in reading, 30 in children's literature, 21 in language arts, and only two on the teaching of writing" (p. 638).

Walmsley (1980) opts for shoring up the teacher training institutions in this respect. Based on questionnaires addressed to one group of elementary teachers who participated in workshops on writing instruction and another group enrolled in a graduate course on elementary reading--eighty-two teachers in all--Walmsley observes that even such interested teachers as these "have very limited training experiences, and appear to know rather little about writing authorities and about where to find good articles on writing research or curriculum." (p. 734)

But Walmsley's proposition that pre-service training be overhauled, however fruitful, seems not to address two separate but self-evident obstacles. One concerns formal instruction, which, in view of the shifting hypotheses that comprise composition theory, would be continuously subject to revision. The other obstacle concerns the placement of teachers. Most teachers who will be working during the next seven or eight years are already in place; their situation calls for continuous reinforcement in precisely what they are teaching while they are teaching it.

One durable prospect for learning on the job was suggested nearly twenty years ago in NCTE's report, The National Interest and the Teaching of English (1961). One of five suggestions for focusing study on various subjects, including composition, was this: "Encouraging teams of college scholars to work with teachers in local schools" (p. 4). More recent commentary helps to put this suggestion into perspective. "Teachers rightfully seek out ideas which have direct application to their classroom teaching," Lucking (1978) observes, "and the truly good teachers probably wish to understand thoroughly the reasons for selecting one teaching approach over another" (p. 578). He suggests that all training closely coordinate both language theory and teaching methodology with the classroom teaching itself. Chew and Schlawin (1978) offer a prudent caution about the ways of integrating these disparate bodies of knowledge. "Too often inservice programs patronize teachers instead of capitalizing on the expertise they have developed in the classroom" (p. 602).

Given all these considerations, how might researchers collaborate with teachers to generate a precise description of writing instruction? Doubtful of the research mode that presents teachers as subjects with little or no understanding of the researcher's a priori hypotheses, we decided to engage in a collaborative study which, by its nature, would preclude such hypotheses. We had no hypotheses to prove or to disprove. We therefore could not--and would not--interfere with the process of discovering whatever we might find. As teachers and researchers interacting, we planned to describe and then to analyze what we described, so that subsequent studies might refine and develop our findings. The testing of hypotheses, thereby, was at least two steps beyond our study.

Even so this project would present other problems in research procedures, and some of them would be unique. Most studies, even those which Medley (1977) carefully selects on the basis of empirically obtained relationships, do not appear to be generalizable to the observation of writing instruction. Moreover, even current hypotheses about teaching would require modifications. Berliner's notion (1978) of "academic learning time" and its effect on student achievement was seductive, but since writing in the elementary schools is often merged with other language arts (reading, speaking, and listening), an observer would find it difficult to separate the time block assigned to writing.

It became evident, therefore, that a whole new framework had to be designed for observing writing instruction. Griffin (1977) has expressed such a need. Significantly, she notes that such an observation should be natural, rather than experimental, focused on the act or process rather than onethe result or product, and addressed directly to behavior rather than to coded reports about behavior.

Dunkin and Biddle's notion (1974) of the importance of observing the process of teaching appeared to be applicable. So did Berliner's description of teaching functions: academic monitoring, diagnosis, prescription, and providing feedback. But since virtually nothing is known about writing instruction as a process or about the functions that writing teachers engage in, we decided that our observation of elementary teachers should be naturalistic, rather than experimental. Such observation would accommodate the lack of any hypotheses about writing instruction and allow us to derive categories which would eventually describe such instruction.

Although the hypotheses of Berliner and Griffin are useful, like most hypotheses about how to observe teaching they do not consider the teacher as an active participant in such observation. Two studies, however, do postulate that participants should play a major role in observation. As early as 1967, Glaser and Strauss formulated a procedure for conducting qualitative research, which entails three successive operations: (a) categories of information are defined by informants in the setting; (b) the categories are tested and refined by the researchers; and (c) the categories are used to describe the behavior of people in the setting.

This procedure offered us a point of departure, although significantly it involves participants that are informers, but not collaborators. More recently, Mergendoller, Ward and Tikunoff (1979) have formulated and applied collaborative strategies suitable for a naturalistic setting. They stress the idea, shared by sociologists and psychologists, that "reality is understood through the individual and social construction of explanatory categories" (p. 1). Such categories, they indicate, should result from collaboration among members of a team "working with parity" and "assuming equal responsibility" (p. 10). Most importantly, they indicate that the problem which the team chooses to focus on should not be predetermined by the researcher; rather, it "should emerge from the mutual concerns and inquiries of the team, and above all, should attend to the teacher's problems" (pp. 14-15).

With such a goal in mind, we raised some indicative questions, and we embarked on collaborative research for the answers. These three questions informed our task.

1. What is writing instruction in the elementary schools?

   This question breeds a cluster of others, addressing epistemology and logistics in no particular order. How do teachers perceive writing? What do they propose to teach, and how do they go about the task? Where does writing fit into the curriculum? What is the domain of writing instruction? And what does that instruction consist of? These questions have obvious contextual implications which suggest the next leading question.

2. What forces directly influence writing instruction in elementary schools?

    This question suggests a determinism at work. What are the constraints in the teaching and learning environment? What are the enabling factors? Given all of the elements of a teaching context, what are the teacher's assumptions about writing and writing instruction? How do these elements combine in defining or delimiting a teacher's goals and intentions?

3. How can collaborative research be used to design effective writing instruction?

    Unraveling this question raises three more questions beyond the first (What is writing instruction?). These three questions raise new issues: What is effective writing instruction? How might it be designed? And what is the role of collaborative research in the design task? The first issue, about effectiveness, implies that the components of writing instruction, once identified, can be analyzed well enough to make them assessable. The second issue, about the design task, implies that these components can be modified and manipulated to achieve some desired outcome. The third issue, about the role of collaborative research, concerns the efficacy of interaction among teachers and researchers in addressing all of these issues.

The first test of its efficacy was at hand as we began this study. Not knowing the answers to these indicative questions, despite the myriad, disjunctive statements that might be answers if we could relate them, we proposed to engage the teachers as peers and colleagues in our search. We reasoned that if anyone could find a way to describe what teachers do, they could. And defining a common language of writing instruction might help us to assimilate many things that are now known but not yet linked together.

The collaborative mode would necessarily limit our search in certain ways and enable it in others. If the teachers and researchers were to be peers, then the teachers could not be subjects. We could not address the effects of their teaching nor the evaluation of their efforts. Moreover, we would need teachers representing different frames of reference insofar as that might be possible. For these reasons, therefore, we could not generalize our data beyond precise, definable limits. These capabilities and these limitations are addressed in Chapter Two of this report, concerning our research design.

We then turn to the leading questions that we have just raised, addressing first, in Chapter Three, the sense of a context within which writing instruction occurs. Chapter Four, the longest part of this report, confronts the main question: What is writing instruction in the elementary schools? And

Chapter Five discusses the possibilities of collaborative research in the task of designing effective writing instruction; that final chapter is based on our inferences about the way in which we as a team addressed the main question and about the significance of the kind of information we discovered thereby. By addressing the indicative questions together, we proposed to state answers--or else better questions--in the teachers' words. We proposed to derive a meaningful description of writing instruction as a basis for those studies of effectiveness that might later be undertaken.

The meaningful description, in fact, turned out to be more than a vocabulary. It is a set of related constructs that reveals a context of constraints, assumptions, intentions, and various kinds of tactical decisions by which teachers delineate writing instruction. It provides a common way of talking about this complex activity.

Chapter Two

Research Design: The Progressive Coding of Naturalistic Observation

The research design described here was intended to define and test a set of procedures by which teachers and researchers together could precisely describe and classify the components of writing instruction. We intended these procedures to remain conceptually simple, to yield acceptable reliability in the coding, and to enable the observers to learn their tasks by performing them. The procedures had to accommodate both types of data analysis which Glaser and Strauss (1976) describe, namely, hypothesis testing and theory generation, for possible use at a later time. Accordingly, this study was designed to yield a model of writing instruction that would be capable of describing the instructional process and of yielding data from which guidelines for future research might be inferred. And, we intended our procedures to be replicable by other teams in other settings.

We began this study with no data base for reference, since almost no research has seriously addressed methods and procedures of writing instruction in elementary schools. (A search of the ERIC index of journals in education reveals that only twenty-nine articles written between 1968 and mid-1980 have focused on this subject; they are annotated in Appendix G. Few of these articles concern theory, and some are merely autobiographical.) The paucity of substantial research, therefore, indicated a need to avoid assumptions and to base our research design on naturalistic observation.

Naturalistic Observation

In accordance with protocols established for naturalistic observation, summarized by Mergendoller, Ward and Tikunoff (1979), we accomodated three aspects of the classroom environment: natural behavior, natural setting, and natural treatment. Drawing from Tunnel's work (1977), Mergendoller et al. describe natural behavior as behavior that "is part of the person's existing response repertoire," natural setting as one in which "people regularly find themselves," and natural treatment as treatment that "the subject would have experienced . . . with or without the presence of researchers" (p. 20). Accordingly, as much as possible, observation did not modify the classroom activities.

We used a large, mixed group of observers. The rationale for this decision is reasonably evident. In the beginning of the project, all observers were expected to record different events or the same events differently. The large size of the group and the extended range of perspectives were both desirable; we wanted to create a useful abrasion among the team members and to avoid achieving premature closure in defining concepts by which to describe writing instruction. Greene (1977) has pointed out that teachers have different epistemologies; even homogeneous groups of teachers represent different ways of describing the same events, and she has proposed that these differences be used to focus energies.

We enriched our deliberations with these natural differences by associating the elementary school teachers with classroom observers whose frames of reference reflected writing instruction at other grade levels. These other classroom observers were four writing instructors and an educational psychologist; their aggregate experience in writing instruction ranged from grade three through thirteen. The different perspectives were intended to enable team members to make inferences together, but these differences would be advantageous only if all team members had equal status in the project. Such equity was, in fact, the case; the eight classroom teachers and the other observers were all full collaborators in developing the model of writing instruction described in Chapter Four.

We designed a team to consist of eight teachers representing grades three through six and also acting as nonparticipant observers (T-NP) in one another's classrooms, five nonparticipant observers (NP), the principal investigator, a consultant from the Rhode Island Department of Education, a project coordinator, and four researchers delegated to special tasks. The NP observers and the researchers were drawn from the membership of the Center for Research in Writing and its staff of research contractors. The principal investigator participated in all of the designated tasks in order to gain a close knowledge of them. These activities were instrumental to the P.I.'s primary responsibilities, which included coordination of tasks and schedules, liaison with the Department of Education and school district personnel, and the reporting of the study.

Selection of Teachers and Classrooms

Our criteria for selecting teachers were related to the tasks they would perform. Obviously, the teachers would be crucial to the outcome of this study. We reasoned that they could not only provide original information but also assess the authenticity of whatever we might discover.

We had eight criteria for selecting teachers to the team, the first two of which concerned the diversity of our sources of information, namely, the teachers themselves and the classes they taught. (1) We sought teachers who would represent different degrees of experience, different attitudes, and different teaching styles. (2) We sought whatever ranges we could find among the student populations with respect to their socioeconomic status and also to the type of instruction they might be likely to receive. The next four of our criteria related directly to the tasks themselves. Each teacher had to agree to (3) observe other teachers, (4) be observed by other teachers, (5) share with one's teammates all of the information that these observations might yield, and (6) engage in rigorous analysis of this information. (7) We sought teachers who would be sufficiently self-confident to engage the scholars as well as other teachers on the team. (8) We wanted teachers who would be available to meet a demanding schedule of conferences and meetings throughout the school year.

To assess the availability of persons who might meet these criteria, we had asked the R.I. Department of Education to identify teachers in any of the 38 elementary school districts in the State. With the help of superintendents and school principals, the Department identified sixty-one teachers who had been recommended by at least one school administrator. In the aggregate, they had taught from four to twenty-five years at grade levels from three to fourteen. Twenty of the nominees volunteered to attend and nineteen of them volunteered to participate in this descriptive study.

These teachers also completed a questionnaire which asked them in several different ways to note some of their own teaching patterns and also to indicate what they considered to be effective writing instruction. Their answers to the questions revealed a set of conventional, public attitudes about writing, a wide range of practices in the teaching of writing, and some indication that these conventional attitudes and the actual practice might be at odds. Given the procedure by which they had been nominated and their own willingness to participate in research, these teachers clearly represented a responsible community of opinion about writing instruction in the elementary schools, so their answers to the questions thereby presented us with an early sense of the context of this study.

There was a remarkable range in the time these teachers allotted to writing instruction. They were asked the number of days each week during which they taught writing; their answers ranged from one to five. They were asked what percentage of the language arts curriculum they devoted to writing instruction; their answers ranged from 10% to 70%. They were asked what percentage of instruction in other subject areas they devoted to writing instruction; their answers ranged from 0% to 70%. These vastly different emphases on writing instruction could be a function of many unknown variables, one of which might be their different perceptions of what constitutes writing instruction.

Their conventional attitudes were engendered by conventional questions. When asked, "What is effective writing?", they answered with remarkable similarity, confirming what Young (1978) defines as the "contemporary traditional paradigm" (cited in Chapter One). Here is a synthetic response constructed from seven different answers: "Above all, effective writing is communication. This communication has the characteristics of being clear, concise, logical, and grammatical." And here is a response constructed from four other answers: "Writing is the clear, concise, logical, and grammatical expression of thought and ideas." All answers equated writing with communication, and two of them implied criteria for effective speech ("Good writing communicates as effectively as speech."). In sum, they not only perceived writing as a product, but as a product exclusively in the transactional mode, focused on the reader with intent to persuade. Their answers did not acknowledge that writing itself might be a learning mode or even that writing is a process in any sense.

But when the teachers were asked to code information about classroom interaction that might be relevant to writing instruction, many of their answers showed an awareness of writing instruction as a process, and a sensitivity to formative evaluation. The questionnaire presented them with different aspects of classroom interaction, based on the classification systems of both Bellack (1963) and Flanders (1970), and asked them to describe what might be effective writing instruction as categorized by these activities. Fourteen of the teachers, for example, felt that goal setting should be structured to students' needs and should be geared to step-by-step progression. As for presenting information, seven of the teachers felt that students should be allowed to respond and to make suggestions as part of the presentation, and two of them stated that the teachers should present information inductively and allow for discovery.

Some of their observations about evaluation were sophisticated in addition to showing good practice. Evaluation, for example, should begin with the assignment, which should be categorically clear about the task. The written work should be evaluated in terms of the goals that the teacher and the students had discussed. Two teachers felt that evaluation should entail at least two drafts of writing, with the teacher responding to the first draft and then allowing the student to rewrite. Two other teachers perceived that evaluation should not merely be addressed to the content of a paper but rather to the way in which it presented ideas.

The responses of the teachers to this questionnaire helped us to formulate some of the guiding questions that Becker (1958) suggests be used to design a naturalistic study. In particular, these teachers had indicated that when they regarded writing instruction in a situational sense, they did indeed have codes beyond the contemporary traditional paradigm. Discovering those codes and the way they cluster was the purpose of our descriptive research.

These nineteen teachers later participated in a discussion of their answers with the five researchers appointed to the team and two members of the research-and-evaluation staff of the Department of Education. In addition to the composition of their classes, their answers to the questionnaire and their discussion of these answers determined the membership of the team. We selected seven women and one man, representing two classrooms at each of four grade levels, three through six. Our choices were fortunate. All eight teachers met the personal criteria for selection. Since the research team was unusually large, interaction was complex, and we needed an uncommon degree of trust and cooperation among all team members; this we achieved. All were veteran teachers with seven or more years of elementary school teaching experience. Even more to the point all of them shared an interest in writing instruction sufficiently strong to motivate them to devote much of their free time to this project for twelve months. All were teaching writing lessons in their classes (while many other teachers in the same schools were not).

These teachers also fulfilled the criteria necessary for the selection of their classrooms. Accordingly, these classrooms represent a considerable range in student populations and instructional modes. Table 1 displays this diversity according to the specific codes we assigned each team member in preparation for later reduction of data. The eight teachers were designated by their classroom numbers: #31 and #32 for the two third grades, #41 and #42 for the two fourth grades, and so on; the five nonparticipant observers were designated as NP #1, NP #2, and so on. Our findings in various parts of this report are displayed in terms of these designators. Whenever appropriate, however, we cite the teachers anonymously with arbitrary designators: Teacher A, Teacher B, and so on.

The teacher designators are used in Table 1 to display the more prominent features of the eight classes in our study; these classes differed markedly. Three schools were located in the inner city, three were suburban, and two were in small towns. And the aggregate enrollment represented a broad range of family incomes. The Rhode Island Department of Education ranks the general socioeconomic status of school populations in the state on a one to nine scale; these eight schools covered the entire range from one to nine. Two of the schools assigned students to classes by ability level; six used heterogeneous assignments. Four of the classes were self-contained (the same teacher taught all subjects except art and music); four had specialized instruction (several teachers taught the same group of students). Three of the classes were distinctive in other ways as well: one was limited to gifted students, one was in a magnet school that presented innovative programs, and one had a large limited-English-speaking (LES) population.

Table 1--Context of Classrooms

Classroom	#31	#32	#41	#42	#51	#52	#61	#62
School Grade Levels	K-4	K-4	4-5	K-6	K-5	K-5	K-6	5-6
Teacher Experience (years)	9	7	9	8	10	11	17	17[1]
Teacher In-Service Writing	none	none	none	one course	none	none	none	one course
School District Population	156,000	17,000	20,000	51,000	156,000	25,000	72,000	16,000
Type of Neighborhood	urban	urban	rural	suburban	urban	rural	suburban	suburban
Ethnicity (percentage)	50% Caucasian 40% Black 10% Other	50% Caucasian 25% Hispanic[2] 25% Other	99% Caucasian	99% Caucasian	66% Caucasian 34% Black	100% Caucasian	100% Caucasian	100% Caucasian
Socioeconomic Status[3]	1-2	1-2	2-3	2-3	1-90%/4-10%	3	3	3-4
Parent Involvement	active	inactive	active	active	very active	active	active	very active
Type of Instruction	specialized	specialized	specialized	self-contained	self-contained	self-contained	self-contained	specialized
Class Grouping	heterogeneous	heterogeneous	homogeneous (gifted)	heterogeneous	heterogeneous	heterogeneous	heterogeneous	homogeneous
Principal's Years at School	3	6	4	15	5	12	5	12
(Enrollment	25	33	29	32	25	33	32	28
(Texts Selected From	21	23	28	28	24	33	29	27

[1] also 17 years administration

[2] Latino and Portugese

[3] KEY: 5-upper class, 4-upper middle, 3-middle, 2-working, 1-poverty level

Progressive Coding

We had two goals for the observation of writing instruction in these eight classrooms. One, as we mentioned earlier, was to evolve a model of writing instruction, a system of codes to describe the instructional process. (By "code" we mean a category of information within a system of categories.) We wanted to design a valid system, based on the terminology of the teachers. Our other goal was to use and test a set of procedures for evolving such a system of codes. Actually, we regarded the procedure for evolving a valid and reliable system of codes as more important than the system itself, since any system we might design could be refined or amended as appropriate by other researchers using the same procedure in other settings.

We concur with Griffin (1977) that not enough is known about writing instruction to begin observation with an *a priori* code. As indicated in the preliminary questionnaire just cited, the teachers were already teaching writing according to some partial codes without necessarily knowing how, or even whether, these codes might be mutually related. In two ways this fact indicated to us the importance of collaborative research. We wanted whatever codes we might evolve to reflect the terminology of the teachers. But we wanted more than merely a familiar vocabulary; we wanted the codes to convey a sense of the goals or intentions in observed behavior. The answers to the preliminary questionnaire confirmed that some goals or intentions were implied in the teaching behavior that the teachers considered to be effective.

Teachers' goals or intentions, we reasoned, would be crucial to our analysis of whatever classroom activity we might observe, since they would influence the decisions that teachers make during the instructional process.

We wanted to be able to infer intentions from behavior, and the possibility of doing so would be greatly affected by the dynamics of the observational team. Accordingly, this study could proceed only with the full collaboration of the teachers, and it would depend largely on their inferences about whatever we might observe together. The teachers, therefore, could not be subjects as teachers might be in a research study committed to testing hypotheses. Only if they were full members of the research team could we gain some knowledge of how the teachers perceive what they do, a subject that none of us knew very much about.

Accordingly, the research design would have to ensure each team member's having an equal and significant role in the gathering and interpreting of data, and we would minimize as far as possible the undue influence of any university bias. The teachers would constitute the majority of the team, and our decisions would be made by consensus. At our first plenary meeting (P, 9/8/79) we agreed that no team member would be evaluated and that the only object of evaluation would be our own work-in-progress. We renewed this pledge to ourselves frequently thereafter.

As the instrument of our collaborative research we chose the procedure of progressive coding. In the broadest sense, progressive coding consists of juxtaposing a description of behavior with actual behavior through successive observations and then modifying the description to make it conform to the actual behavior. The procedure is a simple algorithm of steps that are repeated, like a loop in a computer program, until a definition is precise enough to be used reliably.

Having no code to begin with, we used narratives to record our first observations. We wrote strings of independent clauses in the present tense, which each observer was free to abbreviate or not.

> Teacher tells students about paragraphs (t, ss, para).
> Student asks about complex sentences (s, ?t, sent).

We recorded these early observations on split-sheet pages. Each observer recorded the narrative of what occurred on the left side of a page and used the right side for impressions or speculations if time permitted. From these narratives, we compiled a gross list of words or phrases denoting what had occurred in the classroom. This list was actually a set of primitive codes that we continued to test by successive observations in all of the classrooms. Chapter Four describes the evolution of those codes into constructs, that is, into precise definitions of observed behavior supported by examples.

To anticipate that discussion we describe here the procedure by which these constructs evolved. In the observation process both the T-NPs and the NPs functioned in exactly the same way. Each observation visit was recorded on pages of NCR paper, enabling the observer (either a T-NP or an NP) to retain one copy, to leave another copy with the classroom teacher, and to give a third copy to another team member (either an NP or a T-NP) who had not observed this class session. These three team members then met to analyze the observation record and make appropriate inferences. By arrangement the participants of the trinary meetings were always two T-NPs and one NP, who kept the minutes of the meeting.

The trinary meetings were both the means and the record of our progressive coding; they were crucial to the outcome of our study. Neither teacher nor observer had an unbiased or fully informed view of the observed lesson, and the team member who had not observed the class had only the record to go by. Together they analyzed and combined their perceptions of the lesson, clarifying their various interpretations, and sometimes disagreements. Each meeting lasted an hour or so.

The minutes of these proceedings typically emphasize unfinished business. The power of progressive coding, in fact, depends on unfinished business. The procedure requires both an awareness of the current inadequacies of the coding system and a willingness to retain some of these inadequacies in the system until they can be resolved.

During the academic year we held forty trinary meetings, repeating every permutation of team members three or four times. The minutes of these meetings were circulated to all team members every two weeks: in all, a record of some 40,000 words. We will cite these minutes wherever appropriate throughout this report, using a simple reference for the purpose; if we cite trinary meeting #27, for example, we will refer to "(T27)." The date of that meeting and the designators of the three participants can be found in Appendix A which identifies all of the formal meetings of the team throughout this study. These include plenary meetings (cited as "P" and the date) and also NP meetings, whose function it was to set the agenda for the plenary meetings.

Each type of meeting served a different function in facilitating the flow of information throughout the team. As already indicated, the trinary meetings were the primary means of progressive coding. At the plenary meetings we confirmed decisions about policies and procedures, often using subgroups to help formulate our discussions. The NP meetings served to link the two. Given the large number of team members and the consequent need to resolve difficulties as soon as possible, the structural meeting schedule was necessary. Surprisingly, we even found it comforting to add more meetings to our original schedule; we had anticipated five plenary meetings, and we actually held eleven, most of them at the suggestion of the teachers.

And after the school year we convened five more times to review the data we had generated. This network of meetings ensured each team member of becoming a full participant, with an opportunity to make a significant contribution to the results of the study. All of us recognized that each member's contribution was in fact both real and necessary.

In tactical terms, this communication network enabled us to move through successive stages of defining, testing, and refining categories of information. At the outset we had in mind three sets of tasks: first, to identify codes of behavior; then, to define a valid set of codes; finally, to achieve acceptible reliability in using categories of codes, that is a coding system, to describe writing instruction. To sustain these successive stages of progressive coding, we scheduled ten observation cycles of two weeks each throughout the school year, with a review period after every two cycles. Trinary meetings occurred during the observation cycles, and plenary meetings occurred during the review periods. An approximate schedule linked the ten observation cycles to the rough stages of progressive coding.

Observation Cycles	Tasks	Objectives
Preliminary	Workshop: observing videotyped classes.	Clarify observer's role.
1 & 2	Describe instruction.	Develop tentative code clusters to describe components of instruction.
3 & 4	Test tentative cluster of codes. Do the codes apply across grade levels? Modify codes? Add new codes?	Prepare first draft of categories of codes; determine unit of analysis.
5 & 6	Use first draft of coding system to observe activities.	Define and refine categories to improve validity of codes.
7 & 8	Continue to use coding system and begin reliability procedure.	Define and refine codes to improve reliability of observers (as well as validity of codes).
9 & 10	Continue with coding system and also reliability procedure.	Define and refine codes for acceptable reliability.

Unit of Analysis

Each classroom was observed twice in each observation cycle, twenty times during the year. All of the observation visits to all classes during the ten cycles totaled 160. One primary constraint determined the logistics of observation and, in fact, the number of NPs that we needed. Since the teachers did not wish to leave their own classes more than twice a month, we limited each T-NP's schedule to one observation visit in every cycle. Accordingly, to achieve adequate coverage and also continuity of experience, each of four NPs observed twice as often, that is, twice in every cycle. (The team's fifth NP substituted as needed.)

To familiarize ourselves with the context within which writing is taught, we initially observed periods of writing instruction and periods of instruction in other subjects. During the first two cycles, the duration of each observation visit was a half-day. Thereafter, observers stayed only for the periods of writing instruction, which were generally sixty to ninety minutes long. In the last two observation cycles, however, we resumed observation of instruction in other subjects, in addition to our regular observation schedule, in order to test the uniqueness of writing instruction.

Within each period of writing instruction we define a unit of analysis so as to make it accessible to a naive observer. Initially, we defined a unit as any episode in which the speaker, the topic, and the listener remain unchanged. Thus, a new unit would begin with any change in speaker, topic, or listener. At the end of Cycle #6 this definition was simplified for better reliability in observing, as described in Chapter Four. Using a common analogy from drama we called this unit a "subscene," assuming that the observed period was a "scene."

Summary of Data Sources

The observers' classroom notes constituted our primary source of data, which was augmented by information derived from the trinary minutes. Frequent comparisons of separate minutes yielded new information that was not necessarily in any one of them; this information helped us to formulate our ongoing agenda, which the plenary minutes periodically codified. Together, the primary data in the observers' records and the derivative data in the minutes of these meetings comprised an observation corpus which was our major source of information. Chapter Four describes the development of this corpus as well as the outcome that it documents.

In order to audit the observation corpus and to provide opportunities for comparison, we gathered information from various other sources which fall unevenly into four categories. The most extensive category pertains to the eight teachers on the team. In addition to being the source of the primary, observed information, they were also the source of derived information by reason of their commentary on every aspect of what we observed in their classrooms. The various kinds of data that they provided were highly evident throughout our study, and to categorize them is tantamount to writing Chapter Four of this report. Essentially, the teachers provided data as observers and observed, as respondents to questionnaires, as authors of writing assignments, and as diarists of their own teaching.

A second category of information pertains to the institutional context within which these eight teachers worked. The sources of data subsumed into this category were the legislative and administrative records which inform teaching procedures, as well as the instructional materials which the teachers used. Chapter Three describes the significance of the information that these sources yield.

The other two categories of data pertained to the students and to their writing. Information from these sources comprises a large portion of the final chapter of this report, which concerns the possibilities of further research. Because they supply the categorical bases for most of our correlation studies involving the observation corpus, however, they merit some prior description at this point.

The Writing Sample

Student writing was assigned differently by each teacher throughout the school year. No attempts were made to regularize assignments, so the written texts addressed a wide range of subjects in different modes of discourse, and they were collected at different times. From all of these written texts we selected an extensive sample for analytic assessment. Although the assessment procedure was concurrent with the progressive coding of our classroom observations, we agreed to review the assessment scores only after the school year was over in order to keep the progressive coding unencumbered. After the last observation cycle had been completed, however, the teachers received profiles of the writing of their individual classrooms and also patterns of scores across grades. And they participated in an extended workshop on the analytic assessment of writing, presented by the researchers who had prepared the writing profiles of the students.

The total writing sample selected for analytic description consisted of 2,787 texts, totaling 305,154 words. These texts were written by the 213 students in the eight classrooms who attended regularly during the course of the year. In approximately equal numbers the texts in the sample were written in each of three time spans: September through November, December through February, and March through May. These texts were responses to 137 assignments for impromptu writing in class. The number of assignments per classroom ranged from fifteen to twenty-one; the mean was seventeen. Texts were selected from a larger set representing 170 assignments; the texts responding to thirty-three assignments were omitted because the sets were incomplete, reflecting absences from school, or because certain assignments precluded consistent coding.

Writing Assignments

All assignments of writing tasks were categorized post facto according to one of four emphases: writer-oriented (W), subject-oriented (S), reader-oriented (R), or text-oriented (T). They are listed in Appendix B. In decreasing order, the assignments called for subject-oriented or writer-oriented prose (about attitudes or feelings), reader-oriented prose, and finally, text-oriented prose. These assignments differ with grade levels, as shown in Chapter Five.

Assessment of the Writing Sample

Most of the twenty teachers who had answered our preliminary questionnaire indicated that they sought to reduce errors in writing. Some system of notation that scored errors was therefore appropriate. Because it accommodates the concept of error-reduction, which these teachers had said they emphasized in their instruction, error analysis was used to measure the writing outcome. The usefulness of such analysis has been noted by both Shaughnessy (1977) and Kroll and Schafer (1978), who stress the importance of formative evaluation, that is, of some system of notation that specifically directs the writer to rewriting.

But the system could not obtrude on the naturalistic mode of the project. Primary trait scoring (described by Lloyd-Jones in Cooper and Odell, 1977) and White's system of scoring, discussed in Shaughnessy (1978) were not available options for this reason. Since each system requires careful preparation of designated assignments by teachers, the use of either system would have trespassed on naturalistic observation.

The coding system used to analyze the writing samples was in place at the beginning of the project. Compatible with the Kroll and Schafer concept of error analysis and designed and developed by the Center for Research in Writing, this system counts proportionate errors in twenty-one categories. Already well-tested, this system had been used to analyze the writing of students from grades three to sixteen and also of skilled adult (published) writers.

These 2,787 texts were described in terms of this system of analysis which addressed twenty linguistic and rhetorical constraints in sentences and sentence strings; the analysis also included spelling. Each of these constraints has been defined as a construct and then assigned a coded label. Each of these codes designates a given linguistic or rhetorical constraint. Each code is discrete from the others, and together they represent the universe of constraints that characterize the writing of students in grade levels three through sixteen and also of skilled-adult (published) writers. The coding of any text consists of noting the misuse of any of these constraints or the absence of a constraint from a context that calls for its presence. Table 2 identifies these codes.

This particular system of error analysis was used because it is both accurate and valid. It was derived from a gross list of 140 conventional constraints, as labeled in handbooks and rhetoric manuals; each term had been progressively tested, defined, and redefined through the analysis of some 1.2 million words of prose in 2,100 texts during three years prior to the start of this project. The testing was conducted by a team of some twenty teachers and researchers who represented teaching experience in the elementary, middle, secondary, and post-secondary grades. This system of analytic description was developed by progressive coding, that is, by precisely the way in which the observers in this project developed the codes for the activities that comprise writing instruction.

Table 2

Twenty-one Constraints (and their absence or misuse) Used in CRW's Profiles of Writing

Structural Unit	Code	Name
Paragraph	1	(no) organizing idea
	2	evidence (missing)
	0	one-sentence paragraph (undeveloped)
Paragraph Sequence	3	(no) forecast
	4	(lack of) sequence between two paragraphs
	5	(no) conclusion
	6	reader (not addressed)
Sentence	F	(fragment of) complete sentence
	SV	subject-verb (dis)agreement
	V	verb form or tense (misused)
	Ct	complement (inexact)
	C	(faulty) compounding
	W	wrong word choice
	D	diction (causing syntactic fracture)
	J	joining independent clauses (unconventionally)
	A	(inaccurate) punctuation demarcating phrases and clauses
	PC	phrases and clauses (misused)
	R	referent (not clear)
	T	(inaccurate) terminal punctuation
	Q	(inaccurate) use of quotation marks around quoted discourse
Word	Sp	(mis)spelling

To ensure rater reliability, the readers conducted periodic reliability workshops to discuss problems of coding. In addition, one third of all papers were read by a second reader, and discrepancies in coding were discussed by the two readers. These procedures were time-consuming, but they resulted in a rater reliability in the various categories ranging from .95 to .99.

Because writing outcome has been conventionally regarded as a primary measure of effective writing instruction, we sought to test this assumption as thoroughly as possible. To audit the error analysis of the total writing sample, we conducted further textual analysis of a subset of 356 texts. Representing twelve per cent of the total sample, this subset was selected from the writing samples collected during the fall and spring in each class and was analyzed in terms of four other syntactic and rhetorical measures. We described these texts in terms of the cohesive factors defined by Halliday and Hasan (1976), by T-unit counting as specified by Hunt (1965), and by the measures of growth in writing described by Odell (1977). We also analyzed the usage of nouns, simple modifiers, and verbs.

Interviews with Students

Students' responses to writing in its various aspects were recorded and analyzed by means of two sets of interviews, one in September and the other in May. Each interview lasted about ten minutes, during which the interviewer transcribed each student's answers to thirty-one coded questions. In

September, one third of the students in each classroom were interviewed; in May, every student in each class was interviewed and asked to respond to the same thirty-one questions. In addition, five other questions that pertained to demographic information were asked of the students in May. The students interviewed on both occasions were those whose written texts we assessed throughout the year.

From the set of thirty-one questions addressed to writing, three subsets were used to form three descriptive scales of measurement that applied to each student: one's self-concept as a writer, one's attitude toward writing, and one's concept of writing. The range of these three scales varies according to the number of questions in the subset comprising each scale; the more questions, the greater the range.

The scale labeled "Self-Concept as a Writer" ranges from zero to four, wherein the high score denotes a positive concept of one's own writing abilities. The scale labeled "Attitude toward Writing" ranges from one to ten, wherein the high score denotes a positive attitude. The scale labeled "Concept of Writing" measures one's awareness of the complexity of writing. It ranges from zero to thirty-two, with the higher scores denoting greater awareness of the complexities inherent in writing.

The complete questionnaire appears in Appendix C, wherein the thirty-one questions about writing are assigned code numbers from #11 to #41. The scale labeled "Self-Concept" is comprised of two questions (#30 and #34). The scale labeled "Attitude toward Writing" is comprised of five questions (#14, #22, #30, #40, and #41). And the scale labeled "Concept of Writing" is comprised of eight questions (#21, #31, #32, #33, #35, #36, #38, and #39).

Research Design in Retrospect

At the outset of our study we had no clear notion of how the data from these sources would fit together. We would, of course, be gathering information from widely separated sources at different times throughout the study, but, more deliberately, we decided to keep the writing outcome and population characteristics separate and apart, not to be addressed until after the observation phase of the study. The effect of this decision was to keep us from making premature closures, to remove from our reach the means of preempting our gathering and processing of information.

This decision was compatible with the three major elements of our research design: naturalistic observation for the gathering of data from the classrooms, progressive coding for the processing of those data, and a structured network of meetings to enable the progressive coding to occur. And there were tactical reasons for resisting closure: the need to respect naturalistic inquiry, once we had chosen that mode, and the need to maintain parity among team members, to keep the information flowing from the teachers who were the source of it.

But at the outset we did not realize how fortunate this caution would prove to be. We already knew that writing instruction is complex, but we had no idea how complex--how many factors shape it or the ways in which they shape it--until we began to piece the clues together during the observation phase of our study and to analyze what we had assembled. Only in retrospect do we perceive how the context of writing instruction affects the kind of interaction that we observed. This instructional context is the subject of Chapter Three, which explains how what was happening in the classroom was determined by what was happening without.

Chapter Three

Constraints on Writing Instruction in These Elementary Schools

Each of these eight teachers taught in a deterministic environment. Factors external to their classrooms determined virtually every aspect of the time and space within which they worked. Mandates from various levels in the administrative hierarchy, disbursement of funds, the placement and grouping of students, and institutionalized tests and textbook materials all circumscribed a concept of writing for teachers to address, without specifying the means of addressing it. In such an environment a teacher's goals and intentions characteristically represent an attempt to accommodate these external forces in one way or another: to take useful advantage of them wherever possible or otherwise to minimize their effects.

Some of the consequences of these constraining forces became evident in the answers to the questionnaire preliminary to this study, provided by twenty elementary school teachers in thirteen Rhode Island school districts. As these teachers saw it, their role was to cope. They were aware of the constraints imposed upon them, and they were explicit about the effects of such strictures on writing. The tone of this response was typical: "the administration doesn't value writing, the curriculum doesn't emphasize it, and the standardized materials supplied to teachers don't call for it" (P, 5/24/79).

These twenty teachers identified three principal obstacles to writing instruction. One was the lack of sufficient time for instruction, due to the low priority of writing in the curriculum. Another was the measurement of writing by merely objective tests, which thereby diminished it; they cited familiar tests and commercial ditto sheets "which require the placing of an 'X' in the appropriate box." The third obstacle that they identified, the lack of consensus about writing instruction, was evident by the variety in their designations: "lack of agreement among teachers as to what is 'acceptable writing' or about what is 'effective writing'" (both concepts were cited), the "lack of understanding of how writing is effectively taught," and a "lack of articulation in the instructional process (e.g., paragraph before sentences thoroughly mastered)."

These twenty teachers were reacting to the consequences of institutional constraints: to the procedures and policies of federal, state, and local governments, and also to the publication of instructional materials and standardized tests. Surprisingly their sense of obstacles did not include reference to the populations that they were teaching. But since the nature of the student population might be assumed to affect writing instruction, the researchers on the team reasoned that we should investigate what these teachers had omitted in the way of obstacles as well as what they cited.

With these clues the team members began to compile a description of constraints on writing instruction. As we assembled more and more information during the year, we preceived that the early caucus of teachers had accurately identified what they had to cope with. The contextual constraints of an institutional nature were formidable and far more limiting than the teachers first perceived them to be. On the other hand, the constraints presumably associated with the student populations never materialized statistically. More important, the teachers on the team never did regard the characteristics of students as limiting to writing instruction. Both of these realizations--about institutional constraints and population constraints--comprise the subject of this chapter.

The institutional constraints are the most immediate; they include the legislative and administrative guidelines in the state and also the products and services of the commercial education establishment. The General Laws of Rhode Island, as the laws in many other states, require that the public schools present a set of special interest subjects; in Rhode Island these include physiology and hygiene, health and physical education, fire prevention, narcotics, consumer education, and the history and government of Rhode Island. But there is no mention in the General Laws of writing or writing instruction, and, specifically, the state legislature has given no statutory support to the teaching of writing in the elementary schools.

In its legislative posture with respect to writing, Rhode Island is similar to states with such differing populations and economic environments as Arizona, Colorado, Idaho, Florida, Kentucky, Maine, Michigan, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, North Carolina, Oregon, South Dakota, Tennessee, and Utah. These states are located in eight of the ten federal judiciary circuits, and the judicial record pertinent to the legislative policy in Rhode Island is also similar to the record in these seventeen other states; in none of them has any litigation occurred over a writing requirement in the schools.

The state departments of education specify objectives for writing instruction in four of these states; in thirteen of them they do not, and Rhode Island is among this majority. The separate school districts in Rhode Island are empowered to define writing instruction. District superintendents in Rhode Island normally issue guidelines to teachers to clarify instructional priorities. Procedures for developing these guidelines are approximately the same in the seven districts involved in the study. The superintendent appoints a group of teachers to a committee, in this case a language arts committee, which specifies curricular guidelines. Submitted as recommendations to the assistant superintendent, manager of instructional services, or other appropriate reviewer, these guidelines are authorized by the superintendent or, in two cases, by the school board and then distributed to all teachers.

This final authorization of the guidelines in all subject areas characteristically reflects federal funding. Five of the eight principals whose schools were part of this study affirmed that federally-financed programs have a significant impact on what is taught in their schools. Notably, prior to 1978, the Elementary and Secondary Education Act excluded writing as one of the basic skills. Not until 1980 did schools begin to receive federal funds for programs in writing instruction.

The guidelines for language arts in the seven districts were prepared at various times during the past ten years, but they look much alike. Suggestions for time allotted to language-arts instruction range from ten to twelve hours a week. The guidelines all specify behavioral objectives and prescribe proportionate instructional time for reading, spelling, and communication skills, including speaking, listening, and writing. Like these other subjects, writing is defined in terms of instructional priorities. During an early plenary meeting (P, 10/13/79) the eight teachers discussed the local interpretations of these guidelines. Teacher C, for example, is told exactly how much time to allot to physical education, mathematics, and reading, but there are no instructions about how much time to allot to writing. Teacher F observes that nobody monitors the guidelines for teaching writing in School F because they are so vague; teachers may decide for themselves what skills to teach.

Given such vacuous guidelines, other administrative procedures have oblique effects on writing instruction, although they vary from one classroom to another. Some of the teachers may participate in the selection of their students; others may not. Teacher B must use the instructional materials selected by a curriculum specialist. Teacher E's principal wants a quiet building, thereby limiting students studying in groups. Teacher H must isolate in the classroom any students who present discipline problems. Teacher A, however, enjoys a more flexible administrative environment and is subject to none of these constraints.

Although a teacher's autonomy in the classroom is partly a function of the administrative style in the individual school, all teachers necessarily respond to a leveling kind of accountability. This leveling is caused by the systematic testing of students, the norm referencing of scores, and the publication of results. Test scores are monitored at all administrative levels. The most recent state-wide assessment by the Rhode Island Department of Education, Basic Skills Achievement: A Four Year Assessment (1979), indicates that Rhode Island students have performed at about the national norm during the past four years, somewhat higher in the fourth grade and somewhat lower in the eighth. But more to the point, these scores are newsworthy.

The teachers feel they are placed in a competitive situation over which they have no control. Published annually in The

Providence Journal, or The Evening Bulletin, the test scores provide a temptation to compare school districts. "Naturally we teach to the tests," Teacher B explains; "our superintendent is happy to publish those scores that show we are above the state norm." Teacher E has a more competitive situation; the school principal distributes to the teachers the test scores from all the elementary schools in the district (P, 9/6/80).

These scores are the results of the standardized tests of language skills which are processed annually. Each of the seven districts in this study uses one of four tests: Iowa Test of Basic Skills, California Achievement Test, Comprehensive Test of Basic Skills, or the Stanford Achievement Test. With minor variations, all four include a language scale which consists of spelling, mechanics, and usage subscales. The spelling test generally entails recognizing and/or choosing a correction for misspelled words, and the test on mechanics deals similarly with capitalization and punctuation errors. The usage test involves recognizing and/or choosing a correction for sentence fragments and errors in verbs, pronouns, modifiers, and miscellaneous constructions such as double negatives and redundancies. In short, the standardized tests equate language with grammar and spelling, and none of them measures anything remotely similar to composing.

The pressure to produce high test scores was one of the constraints that the teachers addressed at their first opportunity. The minutes of trinary meeting #4 (T4) accurately state their consensus that the pressure to produce high scores is detrimental to writing. In this conviction they were not alone. Referring to his report to the Ford Foundation, Graves (1978) cites a typical response to this reinforcement of a diminished view of writing. "One sixth grade teacher said, 'I'll tell you why writing isn't taught anymore. It can't be tested. We are so hung up on reporting "X" month's gain to the community on nationally normed tests that we ignore those areas where it can't be done...'" (p. 637).

Textbook editors and authors are, of course, profoundly aware of these tests. Reinforcing the assumption that grammar is writing, commercial teaching materials reveal this awareness and readily provide the means of teaching to the tests. Graves (1977) summarizes the typical reductiveness of the textbooks through their virtual elimination of the fact that writing is a process. "The entire process area is left untouched by these texts. Neither prewriting, composing, or postcomposing activities are suggested with strength or substance in either teacher or student texts." (p. 823). The omission is scarcely an oversight. Commenting on the textbook trade, Stewart (1978) has pointed out that process-oriented instructional material does not appeal to a wide market but that published formulas which focus on writing as a product continue to sell well.

The textbooks available to these eight teachers document this observation--and more. Issued between 1966 and 1980 by ten different publishers, these textbooks present some 4,500 pages of rules, explanations, and exercises that are predominantly addressed to skills in grammar and mechanics. Their remarkable sameness is evident in two respects. The same predominant emphasis occurs across all four grade levels; it also characterizes the textbooks irrespective of their publication dates over a span of fifteen years.

Even more remarkable is the circularity which these books present. There is no particular order among the interior chapters, but there is a distinct pattern in the way they begin and end. At all four grade levels they characteristically begin with an "introduction to language," and they terminate with some form of "introduction to writing." This final section variously describes some of the modes of discourse and offers model paragraphs for reading. The cumulative sequence presents a virtual repetition to the student who starts one grade-level text with an introduction to language, continues that text up to the point of writing, and begins the next grade-level text with an introduction to language.

Presumably, such circularity would occur if each grade-level teacher completed the assigned texts. Because they preferred to design their own instructional materials, however, none of these eight teachers completed the textbooks assigned to them. Observations during the last three cycles of this study indicate that teachers used commercial materials for writing instruction only 7% of the time (see Table 8 in Chapter

Four); and, in fact, two of the teachers pondered the usefulness of these commercial materials early in the study. In trinary meeting #5 (T5) they questioned the connection between the concepts they were trying to teach and the commercial materials that were available to them. They wondered which of these materials were the most appropriate and whether or not they should pay attention to them.

From the beginning the teachers perceived that the curricular guidelines were relatively useless, that standardized tests were outright constraints, and that textbooks were not particularly relevant to what they were teaching. And they soon discovered a large consequence of these limitations in the aggregate: in the way these constraints confounded goal-setting and obscured planning. The discovery occurred when the teachers compiled a synthetic curriculum in order to furnish some context for what they were beginning to see in the eight classrooms. In a plenary meeting at the end of cycle #4 (P, 12/1/79), the teachers caucused by grade levels to answer two questions: "What writing skills do I expect my students to demonstrate in September?" and "What writing skills do I expect them to achieve by June?" Laid end to end their answers form a continuum of repeated elements with no consistent progression from one grade level to another. (This document appears in Appendix E).

In the preparation of this synthetic curriculum the teachers did not consult with team members in other grades. The level of abstraction of the goal statements is specific to the separate classrooms, and it might be assumed that a given goal statement for grade six was understood to be less global than a similar statement for grade three, even though it might not appear so. However, the significance of this synthetic curriculum is that eight teachers in seven districts could arrive in an hour's time at a schema so remarkably similar to the language of the curricular guidelines and the circularity of the textbooks. The teachers saw nothing remarkable about this abstracted continuum. In fact, they were surprised that the other team members should think it odd. "This is the way we cope," Teacher F explained, "I try to take each child where I find him and move him along as far as I can." But what about those behavioral objectives? "Oh, those," Teacher B added, "They're for the lesson plans in the principal's office."

The teacher's sense of continuum helped us to perceive one of the subtler determinants of writing instruction, although several more plenary discussions had to occur before it became clear. In the early plenary meetings the teachers were explicit about the demands on their time: paper work, red tape, report deadlines, and the like, leaving them little time to teach writing. Surprisingly, they later perceived that a major constraint on time is the language arts block itself, a unit of time within which the teachers are supposed to address all of the subjects specified in that curricular guideline. From the beginning we had been puzzled by the answers to the early questionnaire, cited in Chapter Two, about the time that those twenty teachers allotted to writing instruction. Some teachers had said they taught writing daily; others had said once a week. The proportionate time they had all estimated for writing instruction within the language arts block had ranged from 10% to 70%. And now these widely varying estimates began to make sense; the actual time allotted to writing might well have varied extensively, depending on the time remaining after the other language-arts subjects had been addressed.

But an even more interesting set of clues began to emerge from our trinary meetings, indicating that the teachers tended to fuse instruction in writing with instruction in the other language arts. In the first set of trinary meetings, when they were discussing what they observed in the classrooms, they evidently viewed language arts a block (T1). They discussed "listening skills" (T4), and "joining oral and written exercises" (T6); "reading" was mentioned a half-dozen times during the first ten trinary meetings. "Listening" and three modes of "reading" comprised four of the thirty-one kinds of activities which they associated with writing instruction during the first two cycles of observation.

This designation of "activities" anticipates a more exact description of the components of writing instruction in the next chapter, but it documents here our point about language arts as an undifferentiated time block. Until the end of the sixth cycle, more than half-way through the observation period, "reading" was assumed to be an activity of writing instruction; only then did the team members perceive that reading is merely one way of carrying out several activities of writing instruction.

Since our purpose was to describe writing instruction as distinct from other subjects in the language arts block, we did not pursue the interactive nature of instruction in these subjects. Such a study would be technically feasible, beginning with the description of writing instruction that we derived (see Chapter Four), should it serve some rationale beyond our stated purpose here. But that rationale should be based on at least this much information: that writing instruction in this setting has an unstated but generally low priority in the curricular guidelines for language arts, that some teachers interweave writing instruction--as well as writing--with their other language arts subjects. Such further study should also be informed by the consensus among the teachers on this team that writing instruction takes far more time to prepare and to implement than the curricular guidelines indicate, that such significant and necessary commitment to writing instruction is not clearly understood by those who authorize the guidelines, and that writing instruction is therefore not assigned an appropriate priority for teaching time. In sum, the teachers perceive the absence of realistic specification to be a major constraint on writing instruction.

The limiting factor most evident to all of the team members, as soon as we began our observation schedule, was classroom space, both the size and the shape of it. Unlike the unsettling constraint of a language-arts block that obscures writing instruction, the matter of spatial limits promised immediate possibilities for observation. Records of the first class visits contained sketches of the classroom, and all eight trinary meetings in the first observation cycle addressed some aspect of the teaching space and its consequences. We discussed the large, functional layout in two of the classrooms (T2) and the straight rows of chairs in two others (T4,8). We discussed the effects of teaching space on individualized instruction and group activities (T3,5,7), we considered the various consequences of the teachers' location in the room (T4), and we pondered the relationship of classrooms interruptions to the normal noise level of any room (T4). Then we abruptly abandoned the whole subject.

The noteworthy fact of this episode in observing was its sudden termination. Perceiving that classroom space was more of a constant than a variable, we started to look at what was happening within the space, and we began to see writing instruction for the first time. Much later in the observation phase of the study, the team returned to the subject of classroom interruptions, decided that they had no significant effect on instruction, but agreed on a procedure for coding them when they did occur. Aside from this later transaction, however, classroom space was no longer a factor in our observations. For the teachers thenselves, the turning point was significant.

Spatial constraints became less interesting; they were simply to be coped with. And the complexities of the instructional process became far more engrossing.

The institutional context of these eight classrooms is essentally a set of limiting conditions which caused a dissonance in varying degrees among teachers. Each of them could perceive the ways in which their institutional efforts were not being supported--in some respects even subverted--yet none of them had the means of even analyzing these limiting factors, let alone of causing any institutional change. But the teachers felt no such dissonance when they considered their student populations. Throughout our discourse the teachers conveyed their confidence in dealing with this immediate aspect of their environment. Although they affirmed that student characteristics are potential determinants of the teaching process, they did not believe that these character- necessarily affect student learning.

Minutes of the early trinary meetings reveal concern about certain characteristics that might be constraining factors: bilingualism (T1), relative student maturity (T7), lack of enrichment in the home environment (T7), class size with respect to the student-teacher ratio (T4,5), and the effects of a heterogeneous or homogeneous student population (T3,6,8). But they viewed these characteristics as given values that they could accommodate in their teaching; they did not view them as fixed determinants. In the final plenary meeting (P, 10/4/80), the teachers again discussed population characteristics and their effects on writing instruction. They confirmed their earlier sense of the importance of reading ability, attention span, and interest in writing. But without exception they insisted that gender, socioeconomic status, and ethnicity affected only some possible choices of writing assignments and the ways in which teachers might present these assignments. Otherwise, the teachers felt that these variables had little or no effect on writing instruction. Our later correlation studies (reported in Chapter Five) confirmed their instincts.

The reason why the teachers discounted student characteristics became obvious through classroom observation; they perceived their students not as parts of a population but as individuals. This narrow concentration on a succession of individual students is a function of writing instruction, a concept which the next two chapters of this report will address. Even so, the teachers' sense of consonance in this regard points up even more their dissonance about the instructional system. And from all of this contextual information a profile of the teachers begins to emerge.

They were all feeling alone, coping in their own different ways with what they could not control. For this reason primarily they joined this collaborative study. "This project has given us back our pride," one teacher remarked in a newspaper interview about this project. Here were university scholars wanting to join forces, "coming to a group of classroom teachers and saying, 'you have some knowledge that we need.' It's kind of nice for a change." This statement surely confirms the comments by Chew and Schlawin (1978) about the fruitful possibilities of recognizing the expertise of teachers. But, more to the point, in their normal circumstances these teachers were working without the shared knowledge of this team.

For acquiring such knowledge they have not had much help from the State's educational institutions or from their own school districts. There has been scant opportunity for specialized training. In this respect the report by Graves (1978), already mentioned, speaks accurately to the stituation in Rhode Island. Graves cites a search in thirty-six universities that yielded a list of 169 graduate courses available to teachers, of which only two were in writing instruction. The only extended in-service training in writing instruction in Rhode Island during the past seven years was offered by the Center for Research in Writing in 1977 and subsidized by the Rhode Island Department of Education.

These teachers have all taught extensively; as Table 1 in Chapter Two indicates, their experience in classroom instruction ranges from seven years to seventeen years. Yet only two of them have had any in-service training in writing instruction. Of the six others, three have participated in training programs in other subjects, such as creative drama, language experience, reading, and language arts in general, and one has participated in a photography and writing project commercially sponsored. They have taken advantage of what few opportunities they have had. Just how few, in some cases, is acknowledged in the newspaper story of the teachers on our team, and it describes the kind of support that one of them had expected but never received. "None of the professors . . . taught her how to teach writing. None of the administrators she has worked for in the last eight years told her, either." And it continues with the way in which she prepared herself.

> She developed her own methods for teaching writing by reading books and articles, listening to other teachers and just plain experimenting. Her techniques work for her and her students, she says. Other teachers have to find out what works for them. Some are successful. Some are not.

Two of her colleagues echoed her opinion during a trinary meeting, concluding that "Teachers seem to rely greatly on their intuition in teaching writing" (T16). Like these colleagues, she had done what she had to and coped as well as she could, but by and large these teachers cope alone.

Chapter Four

A Model for Analysis of Writing Instruction

The global question that we posed earlier -- What is writing instruction in the elementary schools? -- is pivotal in the series of leading questions that define this study. Although the limits of our data base preclude a generalized answer, this chapter describes a means of providing such an answer. From a limited setting we derived a model for the analysis of writing instruction that is stable enough to be tested by more writing instruction in many other settings.

Any model is useful in proportion to its predictive quality, its capacity to describe whatever may happen. In this case, a model's usefulness depends on its capacity to describe a predictable range of instructional behavior; it must be able to describe differences with reference to some norm and to measure those differences precisely. From any data base a model should be able to engender separate profiles. If it can do all this simply, so much the better. To the extent that a model can provide such measurements, given any goals, it can be used to describe different instructional behavior, that is, to yield different profiles. Beyond this, in the design of more effective writing instruction, it can be used to test the goals themselves -- or the assumed goals.

Writing instruction is bewilderingly complex. This model addresses that complexity; it is comprised of a set of constants (the nine activities) and a set of variables (the ways the activities are used) that accommodate an estimable range of behavior. The constants are activities in which the teacher and the students engage. The variables include the time span of each activity as well as its characteristic qualities or properties. And the estimable range of behavior is defined by sets of activities of differing duration, performed in various modes and in different combinations. The permutations of these components are all measurable, so that changes can be noted. The bewildering complexity of writing instruction lies in the rapid changes that occur from one permutation to another.

Developed throughout ten observation cycles in one school year, the model is based on the description of 160 classes of writing instruction in eight classrooms, as recorded by thirteen observers. Through a procedure of progressive coding, the observers described kinds of instructional behavior, adjusted the descriptions to fit this behavior, then tested them against more observed behavior. By this procedure we slowly evolved successive versions of a model for describing writing instruction. Each version, tested by more observed behavior, became the basis for the next; each generation of codes delineated the instructional process more precisely. This progressive coding continued until the observed components of writing instruction were stable enough to sustain reliable observation. The seventh generation of our model achieved this stability, and we correlated its descriptions of teaching behavior with data from other sources.

This chapter describes the components of the developed model and also the patterns of teaching behavior that we derived by using it; to this extent we report results. But there is more to report than these results. The description of instructional behavior derived at any stage of progressive coding is relatively useful -- but only relatively. Since each successive profile described instructional behavior more precisely than its predecessor, the history of each profile was generative; it appears, therefore, that progressive coding can be used in designing more effective writing instruction, a prospect which we address in the final chapter. Meanwhile, this chapter addresses the history of our developed model as well as the results that we derived with it. In fact, by counterpointing the profile yielded by the model with the procedures that engendered it, we can precisely demonstrate the richness of the struggle in which the writing teacher daily engages.

Components of Writing Instruction

The basic unit of writing instruction in the classes we observed was the writing lesson. Contrary to some common assumptions, the lesson is not a unit of time; it is not a domain of information; above all, it is not a plan. All three of those designations vary unpredictably. Rather, a single writing lesson is delineated by a cluster of activities directed toward a writing task. We define "task" in the deliberately parsimonious manner suggested by Bossert (1979): "Classroom tasks are projects children are expected to perform as part of the instructional enterprise of a classroom" (p. 10, note 2). Accordingly, a writing task is a project that requires writing. Lessons which are directed toward other types of tasks are not writing lessons. A writing lesson continues as long as the activities are directed toward the same writing task. Lessons often extend over more than one day, and a new lesson begins only when a new writing task is assigned.

The writing task sets the boundaries of a writing lesson, but is of little use in describing the lesson. Rather, according to our observational data, a writing lesson is delineated by activities in which teacher and students engage. Each lesson consists of some subset of nine activities. Specifically, it is a given sequence of activities, which may include some repeated activities. Following is a list of these nine activities briefly defined. The numbering order is arbitrary; it has no bearing on the writing instruction that we observed.

The Activities

1. Presenting:

   describing, illustrating, and explaining a skill or concept related to writing, as if most students were not familiar with that concept.

2. Giving Instructions:

   stating specific directions about how a task is to be performed.

3. Orienting:

   acquainting students with information about a topic before students write about that topic.

4. Reviewing:

   reminding students of some skill or concept about writing that has been previously presented.

5. Writing:

   scribing two or more sequential sentences on paper (or other medium).

6. Rewriting:

   scribing a later draft of something already written.

7. Sharing Writing:

   showing or reading one's own written text to other students.

8. Evaluating:

   judging a written text, usually to encourage writer to improve it.

9. Editing:

   changing a written text: an extension of the activity of writing it.

All of these activities are teacher-directed. Teachers play a dominant role in (1) presenting, (2) giving instructions, (4) reviewing, and (8) evaluating. They normally play a supportive role in (5) writing, (6) rewriting, and (9) editing. Students and teachers together participate about equally in (3) orienting and (7) sharing writing.

Each activity is defined as a construct. Appendix F lists a detailed operational definition of each one, with examples of what it is and what it is not. In addition, since writing is the basis of the instruction that we are describing, we include its full definition here. This definition not only served our observations but also determined our selection of student texts for analysis. Examples of writing appear with this definition in the appendix.

> For purposes of observation writing is an activity performed by a student or students. Specifically, writing is a sequence of two or more sentences generated by the student or students; the second sentence in some way continues the first. These sentences may be in prose or in verse.
>
> Some students may not write complete sentences; consequently, fragments are acceptable in this definition, if it is apparent that the teacher assigns a sequence of sentences or that the writer is attempting to write a sequence of sentences.

This definition of writing fairly represents the degree of detail in the other activity constructs. Separately and together all nine of these constructs have passed three separate tests of validity.

1. They have content validity as a result of the way they were generated: progressively, by repeated juxtapositions of definition with actual behavior over an extended period of time, in eight different classrooms. In all, sixteen team members, with a variety of perspectives on education, participated in the generation of these constructs.

2. They also have construct validity, as represented by the published articles on methods and procedures of teaching writing in the elementary schools cited earlier in this report (and annotated in Appendix G). All twenty-nine articles can be classified according to these nine activities. The twenty-nine articles comprise the entire body of published literature on methods of teaching writing in the elementary schools from the ERIC data base. They are written by people in a variety of school settings, yet all use concepts which are equivalent to these nine constructs.

3. The constructs also have face validity. Without prior study a group of fifteen school administrators and teachers in middle and high schools were able to code a videotaped third grade writing lesson in terms of these nine activities. Presented with a brief description of each activity, all fifteen observers recorded the

lesson without substituting or adding any other activities.

Coding the Components of the Profile

These activity constructs appear to be valid descriptions; they are the constants of the profile of writing instruction. From the perspective of this profile we can describe the complexity of the instructional process, the range of teaching behavior, the qualities that are unique to writing instruction, and the features that distinguish one writing lesson from another. These aspects of the instructional process are all functions of the variables of the model and of the ways in which sets of characteristics modify the nine basic activities. These various considerations comprise the bulk of this chapter, and we will address them after a brief description of the procedure by which we generated the components of the model.

Some prior sense of the way we used progressive coding should make it easier to assess our interpretation of what we discovered. Progressive coding is generative; it proceeds by trial and error, and the detours it engenders en route are functional to precise definition. In our case, these detours helped us to determine the territory that we were mapping as well as the reference points within it. Since we arrived at definitions of all the activities and their characteristics by the same procedure, we can illustrate the nature of the journey by describing a few of the more critical detours.

We began, in fact, with a detour. During the first two observation cycles the minutes of the trinary meetings focused on the constraints that limit and hamper writing instruction (see Chapter Three), as if to clear away the debris before we could address our task. The detour was helpful; we became a community. Then the focus of the minutes changed abruptly as we began to ponder the nature of writing instruction. From the first eight trinary minutes we drafted a list of all the terms that denoted the instructional process. There were thirty-one of them, most of which were high-level abstractions; many of them overlapped. We then edited the list, separating activities from characteristics of activities and also adding a few new terms which this editing procedure had brought to mind. The minutes of an early plenary meeting record this prospect: "We are beginning to see that these activities represent certain kinds of decisions that teachers make in given classroom situations" (P, 10/27/79). And this realization focused our task thereafter: the more precisely we could code these activities, the more accurately we could describe the teachers' strategies and decisions.

During the third observation cycle we designed a grid, or matrix, which displayed activities (in the left-hand vertical column) and characteristics of activities (horizontally across the top). The most developed form of the matrix presented the description of an activity, its code number, and the clock time of its beginning and ending. The grid also presented a series of columns across the page wherein the observer could place check marks for the appropriate characteristics of any given activity. The final matrix was the tenth version of the original split-sheet narrative, each version having grown out of the imperfections of its predecessor. Table 3 (p. 84), shows this final grid; Appendix H contains all ten versions of the observation forms with a summary of the major changes in each successive version.

Several detours marked our progress toward the first, primitive grid. How long and how detailed should an observation record be? How much information did we want? How could we code "motivation" (and what was it, anyway)? Should an observation record reveal the affective quality of a writing lesson? What were we really looking for? With the help of these nagging, useful questions (T9, 13 and P, 11/17 and 12/15/80) we arrived at four decisions that determined our course thereafter.

1. The coding system should be accessible to unsophisticated observers, such as we were at the time. Identifying the codes, therefore, should not depend on the observers' subjective impressions. As far as possible they should depend on low-inference observations. (This clearly helped our reliability in the later stages of the study.)
2. We would retain the narrative form to help us interpret the codes. (This redundancy later helped us to interpret what we had seen.)
3. All coded items on the observation grid should be

discrete and mutually exclusive.

4. To warrant this discrete quality, we would build constructs of each activity and each characteristic on the grid. (This arduous task was not completed until the seventh observation cycle; as referenced earlier, Appendix F contains these constructs.)

Once we had designated the probable categories of the grid, we began defining the activities and their characteristics and then delineating their boundaries. Details made a difference on how accurately we could observe. Based on the frequency with which observers checked the various items, we combined some and separated others: we merged "vocabulary" and "figures of speech" into "word usage" and defined the construct accordingly; we subsumed "penmanship" into a category called "format"; we changed "verse" to "form," enabling the observer to designate whatever rhetorical form the teacher might address. And we wrestled with more abstract concepts. The interaction of teacher and student was seen as important (T5), but how could we designate its occurrences without endless repetition? The answer lay in the juxtaposition of an activity with any set of characteristics. And what about "questioning" (T12)? Is it an activity or a mode of conducting an activity? Do its functions distinguish it as being one or the other (T17)?

Throughout observation cycles #4, #5, and #6 we encountered another detour; the trinary meeting minutes record fruitless searches for patterns of sequence among the activities. The model was working better than we knew, yielding highly individualized profiles, as we later realized (T28). But our premature searches for reductive patterns did at least make us aware of two significant occurrences. One was that certain activities tended to cluster, but not consistently; evaluating and editing were notable in this regard. The other occurrence was the frequent repetition of activities within a lesson, some more than others. Reviewing, for example, which indicates a teacher's sense of the need for systematic reinforcement, occurred often; as one teacher put it, "writing instructors spend considerable time restating the obvious" (T18).

Our most extended detour concerned writing skills, specifically, our repeated attempts to code them accurately as part of the instructional process. In this context, we defined a skill as an acceptable degree of control that a student exercises over an operation or set of operations. We agreed with the common assumption that writing skills are associated with the intended outcome of writing instruction, and we tried to delineate precisely both the presence and the nature of skills in the instructional process. But we discovered that we could not delineate them. This detour engaged us throughout the entire observation period of this study; on the six grids that we evolved during the last six observation periods, the configuration of "skills" changed five times.

The crux of our problem lay in the elusive nature of "skills." We could observe a teacher's references to skills, which were characteristically related to the written product, but we could not observe the skills themselves. Activities or operations in the instructional process are observable. But control is a relative term, and the observation of it calls for a high degree of inference. Consequently, observing the degree of control that a person exercises over his or her performance of an operation is problematic. In any case, the varying degrees of control that these students exercised over the operations involved in writing were not observable; the high inference needed for such observation was more than even our systematic scrutiny could accommodate with accuracy.

We did not resolve this paradox until the end of the final observation cycle. The minutes of one of the last trinary meetings, which was devoted to a final review of our observational model, yield this resolution: "Although we accepted 'skills' categories, we've never been satisfied with our attempts to classify them....Now we perceive that the skills themselves are not observable; they are merely the focus of the activities that we've identified" (T38). All along we had been observing foci and calling them skills, so we made the appropriate substitution on the final grid (see Table 3).

Even had we been able to observe skills as such, however, we could not have used them as the basis for our observational system. Even the teachers' references to skills, which we could observe, were sometimes problematic. For example, our observation records indicate that during the activity of giving instructions the teachers typically referred to several skills at a time; in a cautionary way they would quickly inventory all the constraints that they wanted the students to heed, that is, the skills that the students were to practice in the writing task, as if all these skills were a single configuration -- a gestalt. This habit of referring to skills as a collective entity showed up often in the minutes of our early trinary meetings: "Skills are a necessary background for writing" (T4), for example, or "Concern with mastery of basic skills was noted" (T8). We gradually realized that such jargon was really obscuring the genuine confusion inherent in what Teacher A called "the web of skills," and the teachers themselves confronted this confusion; "We found that we were trying repeatedly to force subjects, such as spelling and punctuation, into places where they didn't quite fit" (T11), and "The activities of teaching and reinforcing basic writing skills were so pervasive that the category appeared to be useless." (T10). The minutes continue, "Even more troubling was our awareness that the term 'basic skills' applied to reading, editing, and studying as well as to composing." In trying to observe skills we were indeed dealing with a folklore. On the one hand, the collective nature of "skills" in general prevents one from talking precisely about the subject. On the other hand, a common habit of reference in the schools limits the domain of writing skills to rules about punctuation, capitalization, and other aspects of usage referred to as "mechanics." Given the institutional procedures which guide teachers and the instructional material available to them (see Chapter Three), there was much precedence, unfortunately, for equating the "mechanics" of language usage with writing. But precedence notwithstanding, a subset of skills cannot equal the whole. Moreover, "skills" as a whole do not equal writing; although many skills pertain to the writing process, they are not components of it.

In trying to observe every reference to skills, let alone the skills themselves, we were working within a context of widespread misunderstanding. Our attempts to deal with this folklore, however, did achieve some clarifying results. By forcing us to define our terms, progressive coding enabled us to see beyond the conventional constraints of sentence writing. The teachers spoke of the "need to teach children to think, probe, and analyze"; children "should be encouraged to get their thoughts down on paper first, without having to worry about spelling and punctuation at the same time" (T4).

Moreover, the teachers were well aware of links between thinking and writing. In addition to a category of "mechanical skills," the observation for cycle #4 included skills that pertain to the extended organizing of information, which we called "categorizing," "selecting," and "putting in series." These references to basic cognitive operations were removed from the next grid because our observations could not readily discriminate among them -- "these high level skills are hard to code" (T19) -- yet even their presence on the grid is a sign of our collective attempt to modify and extend the common concept of skills. We did perceive that teachers in the upper grades were indeed referring to skills beyond the sentence level, specifically related to the rhetorical concepts of "purpose" and "audience." We included these two concepts in our grid during the final observation cycle, and we found that indeed these skills were being addressed in grades five and six and also in the fourth-grade classroom that was populated by gifted students.

Yet one more reason caused us to abandon skills as the basis of our observation system. References to skills could not delineate the writing lesson; there was no necessary correspondence between a teacher's references and what actually occurred. Simply declaring an emphasis on a skill or set of skills did not warrant that a lesson would follow that emphasis. We will address this matter in more detail later in this chapter, when we discuss the characteristics of the activities of writing instruction. Meanwhile, we note briefly here that framing this model of writing instruction in terms of activities rather than skills, although it contradicted our early assumptions, is nevertheless consistent with recent studies of teacher planning.

The traditional model of lesson planning places objectives (stated as skills) in the central position. Teachers are supposed to think first of the objectives for the lesson and then plan activities accordingly (see Tyler, 1950; Popham and Baker 1970). But recent studies of planning reveal that the content and the activities of the lesson are what teachers first think about when they plan lessons. Objectives, or skills, are infrequently considered when planning lessons, and then only after the content and the activities have been set (see Yinger, 1980; Peterson et al., 1978; Zahorik, 1975).

In light of this research on teacher planning, it may seem reasonable to assume that a writing lesson can be defined in terms of the content of that lesson. In a writing lesson, however, "content" has a different meaning from what it has in most lessons. The "content" of a writing assignment pertains to the subject or the topic of that assignment, and to the extent that a subject or topic of an assignment is described or discussed in class, "content" can be observed and recorded. But the subject or topic of a writing assignment is only one aspect of the activity of orienting in which the teacher engages. In the larger sense, the "content" of the whole writing lesson could be described as the writing process, that is, the sequence of mental and motor activities in which the writer engages. But "content" in this sense requires a different focus for observation, a focus on the student rather than on the teacher. At any rate, the minutes of the trinary meetings report only scant discussion of this concept.

Although we quickly discarded the notion of content, one other assumption was harder to discard. This is the assumption that writing lessons can be divided into three stages: pre-writing, writing, and post-writing. During the first three observation cycles, the activities on the grid were organized into these three superordinate categories. But these categories posited a static arrangement of activities which the observations contradicted. Activities which seemed logically to belong to pre-writing, for instance, were seen to occur while the students were already writing and even after they had completed a draft and were editing it. There was no definite point in the lesson at which pre-writing activities stopped and writing or post-writing activities began.

Although the activities of "writing" and "editing" were all incorporated into the grid by the end of the fourth observation cycle, the static category of "pre-writing," significantly, was never compatible with the observed sequence of activities. Attempting to delineate this apparent continuum, we made a distinction and then tested it. We distinguished between activities which occurred "inside the writing process and outside (before or after) the writing process." Although the third and fourth version of the grid specified "in-process" and "out-process," no observer could specify such a distinction, so we omitted it from the grid. In a final attempt to discern the nature of this concept, we inserted in the ninth version of the observation grid an activity called "pre-writing," but during the tenth cycle no one observed such an activity in any class. The teacher's orienting could be observed before the students wrote, but the student's mental activities during that interval could not be observed. Whether or not pre-writing is an aspect or a stage of the writing process is another matter; what we concluded, in any case, was that pre-writing was not a component of these teachers' directions of writing instruction.

Progressive coding confirmed our reliance on activities in our description of writing instruction; it also achieved content validity for the nine activities constructs. As mentioned earlier, moreover, these constructs passed two other tests of validity: construct validity, as represented in the literature of writing instruction in the elementary schools, and face validity, as tested by a control group of school administrators and teachers in various grade levels. Accordingly, these activities are the constants of this descriptive model. In any given lesson, however, each activity is modified by three kinds of variables: its duration, its order in a sequence of the other activities, and those modal characteristics which determine its precise nature. Even if two lessons were comprised of the same activities extending over the same span of time (a phenomenon which we never observed), they would still be distinguishable by any one of these variables. Actually there are sets of variables concerning the duration, sequence, and modal characteristics of activities, and we will address them in turn. All of these variables are coded in the final observation form, shown in Table 3.

Table 3 -- Final Observation Grid

SUBSCENE CUES

ACTIVITIES

PRESENTING (1)
GIVING INSTRUCTIONS (2)
ORIENTING (3)
REVIEWING (4)

WRITING (5)
REWRITING (6)
SHARING OF WRITING (7)

EVALUATING (8)
EDITING (9)

CLASSROOM____________

OBSERVER____________

DATE____________

PAGE____________

			PARTICIPANTS						MODE				MATERIALS						FOCI OF ACTIVITIES										
TIME	NARRATIVE		T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	Telling	T Q/S responds	T Q/no response	S Q/T responds	A/V	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form:

Summary of visit (on last sheet):

The Duration of Activities

The duration of each activity in a lesson determines several time variables in writing instruction. One is the pace of the lesson; another is the teacher's characteristic way of generating emphasis. In order to measure this duration we used the construct of a subscene, which is essentially an episode with two components: an activity and a set of participants; when either component changes, a new subscene begins. In sixty lessons during the last four observation cycles, 957 activities occurred. In the aggregate the median length of each subscene was three minutes. Nearly half of them lasted one or two minutes, and about a quarter of them lasted five minutes or longer. Writing instruction proceeds at a rapid pace.

The differences in the duration of subscenes help to distinguish one lesson from another; they also help to characterize a teacher's strategy within that lesson and also across many lessons. The median length of subscenes for each teacher ranged from two minutes to almost five minutes. But even the teacher with the longest median subscene length engaged in a number of activities that lasted from one to two minutes. Table 4 lists the median subscene lengths for each teacher.

TABLE 4

Activity durations, by teacher

Teacher	Median duration of activity	Percent of all activities over 5 minutes long
31	3.0 minutes	20%
32	4.8 minutes	37%
41	2.5 minutes	20%
42	3.1 minutes	32%
51	3.8 minutes	23%
52	2.2 minutes	20%
61	2.9 minutes	21%
62	3.3 minutes	20%
Combined	3.1 minutes	23%

The relative time spent in each activity throughout a lesson indicates the way the teacher uses the activities to achieve certain emphases. Based on sixty observations in the last four observation cycles, Table 5 shows the proportionate time spent on each activity. Accordingly, writing and evaluating together constitute 34% of the writing lesson. All five activities pertaining to written texts (writing, rewriting, sharing writing, evaluating, and editing) constitute 50% of the writing lesson.

Table 5

Mean Proportion of Time Spent on Each Activity

Activity	Proportionate Time
1. Presenting	6%
2. Giving Instructions	14%
3. Orienting	16%
4. Reviewing	15%
5. Writing	17%
6. Rewriting	3%
7. Sharing Writing	6%
8. Evaluating	17%
9. Editing	6%
	100%

With reference to these aggregate figures, several differences indicate diverse teaching strategies. One is an emphasis on the writing process; the other is an emphasis on the written product. Both are defined by the relative amount of time devoted to each of the activites. Appendix I shows the proportionate amount of time each teacher spent on each activity, compared to the mean for all eight teachers. Accordingly, one third-grade teacher, two fourth-grade teachers and a fifth-grade teacher spent a large proportion of time in the activities of orienting and writing, thereby indicating emphasis on process. One third-grade teacher, one fifth-grade teacher and two sixth-grade teachers spent a large proportion of time in the activities of presenting, reviewing, and/or evaluating, thereby indicating an emphasis on product.

These two activity clusters are typical rather than specific. Emphasizing either process or product, they have been recognized by teachers for many years. We refer to them as "strategies" rather than "styles" because it was often evident in the narrative part of our observation record that the cluster reflected a teacher's conscious decision to respond in a certain way to a given situation. Moreover, since these clusters varied with every teacher from one lesson to another, they do not appear to be a function of any teacher's personality.

Discussing various strategies and their emphases (P, 10/4/80), the teachers suggested these factors as influencing their decisions for allocating instructional time: the age and range of language ability of their students, the particular mode or form of writing on which they were concentrating, and the available teaching materials. When asked if the socioeconomic status or ethnic background of their students might affect these types of decisions, they were surprised, and they responded by speculating about personalities, although they were referring to the sense of a group personality. But the teachers did not even relate to the notion that SES indicators or ethnic background might affect their decisions about strategies.

The Sequence of Activities

In addition to the duration of each activity, the sequence of activities is a distinguishing feature of any given writing lesson. Table 6 indicates the sequencing of 957 activities observed in Cycles #7 through #10. The table shows how many times each activity was preceded by and followed by every other activity. The following patterns help to define the whole writing lesson and also the function and meaning of each activity in it.

1. Lessons generally began with giving instructions (31%), orienting (28%) or reviewing (30%).
2. Writing was generally preceded by either giving instructions (49%) or reviewing (22%).
3. Writing was directly followed by a number of different activities. Evaluating was the most common (27%), but every activity except rewriting immediately followed

writing. This is but the first indication in our data of the interactive nature of these activities. Other indications will be discussed.

4. There is no general linear sequence. Any one activity can be followed by nearly any other activity.

5. Observed periods ended with giving instructions (23%), evaluating (26%), or writing (15%). The particular activity which ended an observed period often indicated the sequencing of the writing lesson over different days. Observed periods that ended with writing or giving instructions tended to be continued another day. Observed periods that ended with evaluating were less likely to continue another day. The ending of the writing lesson itself was problematic. Approximately half of the observed periods represented complete lessons, although even in these cases it was not uncommon for some students not to finish their writing and, hence, to finish the writing lesson, on another day. Thus, no single activity typically marked the end of the lesson.

Table 6

Activity-Pair Matrix For All Classrooms Combined

FIRST ACTIVITY	SECOND ACTIVITY Presenting	Giving Instructions	Orienting	Reviewing	Writing	Rewriting	Sharing of Writing	Evaluating	Editing	END OF PERIOD
Presenting	13	19	17	11	3	0	0	4	1	2
Giving Instructions	8	28	41	47	38	4	10	17	7	14
Orienting	20	48	29	39	6	0	5	5	1	3
Reviewing	15	50	36	21	17	0	15	23	9	2
Writing	1	12	3	13	3	0	7	21	9	9
Rewriting	0	4	0	0	2	0	0	4	0	5
Sharing of Writing	2	8	6	10	0	3	10	17	2	4
Evaluating	5	19	4	22	5	6	11	25	11	16
Editing	1	7	3	7	3	2	4	8	9	6
BEGINNING OF PERIOD	5	19	17	18	1	0	0	0	1	0

(Figures represent actual occurrences of each activity pair. Total number of pairs was 958, in 60 lessons.)

Each number value displayed in Table 6 is the number of occurrences of each activity pair. The matrix of these occurrences shows the complexity of the writing lesson. Any activity can be followed by any other activity. Accordingly, at the conclusion of each activity in the lesson, the teacher is faced with a variety of choices for making the next move. The conclusion of every activity becomes for the teacher a point of response. At that point the teacher must opt for one of many possibilities.

This tactical situation contradicted our assumption that initiating of an activity was characteristically consistent with a teacher's planned instruction. These planned intentions were often modified and sometimes even abandoned as the lesson proceeded. The teachers' decisions to revise the lesson were characteristically responses to the pace and direction of the previous activity as well as to their perceptions of student responses.

The number and extent of these responsive decisions to change a lesson plan confused observers during the first observation period while we were still trying to identify activities. But as we stabilized the constructs of these activities, we perceived that ad hoc revision of a writing lesson was commonplace. By the end of the sixth observation cycle, observers took for granted the dozens of tactical changes which a teacher characteristically makes during a writing lesson. It became evident that a teacher's lesson plan is not a reliable forecast of what actually happens in the lesson.

Characteristics of Activities

Seven of the nine activities (all except writing and rewriting) can occur in different ways, depending on four variables. These variable sets are (1) the PARTICIPANTS involved in the activity, (2) the MODE of presentation, (3) the MATERIALS used in the presentation, and (4) the FOCUS of the activity. Definitions of these characteristics appear in Appendix F.

Six possibilities comprise the grouping of PARTICIPANTS who engage in any activity. Only one occurs at any time.

1. Teacher with whole class
2. Teacher with group of students
3. Teacher with single student
4. Teacher with student (serial), i.e., one student at a time in a series of students
5. Group of students without teacher
6. Students working singly

Any of four possibilities characterize the MODE of presentation. One or more may be used in an individual activity.

1. Telling (by teacher or student)
2. Teacher questions; student(s) respond(s)
3. Teacher questions; no one responds
4. Student(s) question(s); teacher responds

The MATERIALS of a presentation in writing instruction can be described in any of six ways. More than one may be used at a time.

1. Audio-visual
2. Directive (commercial)

3. Directive (teacher-made)
4. Common experience of students
5. Reading material
5. Student(')s' writing

The observers confirmed eleven FOCI of activities. More than one at a time may be present. These foci were grouped in two sets: those generally pertaining to a single sentence and those pertaining to sentence strings.

1. Spelling
2. Capitalization
3. Punctuation
4. Word usage
5. Format/penmanship
6. Sentence syntax
7. Outlining

-----

8. Paragraph
9. Paragraph sequence
10. Purpose/audience
11. Form: ________ (specific genre noted by observer)

The first three sets of characteristics stabilized by the end of the fifth observation cycle, but the fourth set, the FOCI of activities, remained unstable. Although each FOCUS was observed, and although the aggregate of FOCI could accomodate all observations, the set as a whole -- as a concept -- remained problematic. Observers continued to deliberate over what constitutes a focus, especially when a teacher mentioned three or four of these items together.

Tables 7, 8 and 9, as well as 6, display the characteristics associated with each activity. These tables are derived from the observations of sixty lessons in the last four cycles.

Table 7, concerning PARTICIPANTS, indicates that the teacher characteristically addresses the whole class in the first four activities: presenting, giving instructions, orienting, and reviewing. The teacher characteristically addresses one student or group of students in activities #8 and #9: evaluating and editing.

Table 8, concerning MODE, indicates that the teacher engages in more monologue in presenting, giving instructions, and evaluating, more dialogue in orienting, reviewing and editing, and very little interaction during writing and rewriting.

Table 8 also indicates that MATERIALS of some kind were used in 59% of the writing lessons. The most common instructional material was the students' own writing, used primarily in the activities of sharing writing, evaluating, and rewriting.

MATERIALS other than the students' own writing were used most frequently in presenting (64% of presenting activities used at least one kind of material other than the students' writing) and in orienting (53% of orienting activitues used at least one material other than the students' writing).

Table 7

Relationships Between Activities and Participants

		PARTICIPANTS						
ACTIVITY		T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1.	PRESENTING	75.7 %	8.6 %	0.0 %	1.4 %	1.4 %	0.0 %	12.9 %
2.	GIVING INSTUCTIONS	51.9	29.5	1.9	3.3	0.5	0.9	13.1
3.	ORIENTING	64.7	22.4	0.6	0.6	0.0	2.6	9.0
4.	REVIEWING	53.7	25.5	8.0	3.2	0.5	1.1	8.0
5.	WRITING	5.1	6.4	5.1	3.8	6.4	56.4	16.7
6.	REWRITING	0.0	6.7	0.0	0.0	0.0	53.3	40.0
7.	SHARING OF WRITING	14.5	46.8	3.2	8.1	11.3	1.6	14.5
8.	EVALUATING	9.7	16.9	17.7	33.1	1.6	1.6	19.4
9.	EDITING	12.0	22.0	26.0	10.0	6.0	8.0	16.0
	TOTAL	41.5 %	22.7 %	6.4 %	7.2 %	2.1 %	7.0 %	13.2 %

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Table 8

Relationships Between Activities and Modes and Materials

ACTIVITY	MODE: Telling	MODE: T Q/S responds	MODE: T Q/no response	MODE: S Q/T responds	MODE: NONE	MATERIALS: Audiovisual	MATERIALS: Directive (Commercial)	MATERIALS: Directive (T-made)	MATERIALS: Common experience	MATERIALS: Reading material	MATERIALS: Students' own writing	MATERIALS: NONE
1. PRESENTING	50.0 %	37.1%	0.0%	10.0%	20.0%	31.4%	11.4%	11.4%	12.9%	15.4%	5.7%	30.0%
2. GIVING INSTUCTIONS	75.2	16.4	1.4	6.5	10.3	12.6	10.3	7.0	6.5	3.7	15.0	49.1
3. ORIENTING	25.6	58.3	1.9	1.3	18.6	17.3	8.3	5.1	19.2	9.0	8.3	38.5
4. REVIEWING	31.9	62.2	1.1	3.2	12.2	14.9	5.3	5.3	8.5	3.7	21.8	45.7
5. WRITING	6.4	9.0	0.0	6.4	79.5	5.1	7.7	3.8	11.5	3.8	21.8	51.3
6. REWRITING	6.7	0.0	0.0	0.0	93.3	6.7	0.0	0.0	0.0	0.0	40.0	60.0
7. SHARING OF WRITING	24.2	30.6	0.0	6.5	45.2	16.1	0.0	0.0	3.2	0.0	69.4	27.4
8. EVALUATING	41.1	34.7	1.6	9.7	33.1	4.8	8.1	3.2	4.8	4.8	53.2	28.2
9. EDITING	24.0	34.0	2.0	0.0	48.0	4.0	0.0	10.0	4.0	0.0	40.0	46.0
TOTAL	39.7 %	37.1%	1.1%	5.2%	26.9%	13.3%	7.2%	5.5%	9.2%	5.1%	25.[illegible]%	41.4%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

The FOCI of activities are closely associated with the concept of skills. During all ten observation cycles, in fact, they were identified as skills, while the observation team continued to rearrange them in different categories.

Table 9 displays the percentage of times each skill was addressed in each activity. This table documents the primary importance of punctuation. Of all possible FOCI, punctuation ranked first in five of the nine activities, and second in two others. Overall, 16% of all activities dealt with punctuation. Table 9 also shows that a majority of activities (51%) dealt explicitly with _no_ FOCUS.

Table 9

Relationships Between Activities and Foci of Activities

	FOCI											
ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	5.7%	5.7%	14.3%	12.9%	10.0%	2.9 %	0.0%	8.6%	0.0%	2.9%	20,0%	42.9%
2. GIVING INSTUCTIONS	8.9	6.1	7.0	7.9	14.0	6.5	2.3	3.7	8.9	7.5	7.9	59.3
3. ORIENTING	1.3	0.6	1.9	7.1	2.6	1.9	1.9	3.8	3.8	1.9	5.1	76.9
4. REVIEWING	11.7	14.4	22.9	11.2	16.0	12.2	3.2	11.7	8.5	7.4	9.6	41.5
5. WRITING	19.2	15.4	17.9	12.8	12.8	17.9	2.6	20.5	9.0	9.0	5.1	50.0
6. REWRITING	13.3	13.3	20.0	6.7	20.0	20.0	0.0	13.3	13.3	13.3	6.7	66.7
7. SHARING OF WRITING	25.8	24.2	25.8	12.9	27.4	22.6	0.0	14.5	22.6	22.6	8.1	46.8
8. EVALUATING	29.0	20.2	27.4	26.6	15.3	16.9	3.2	11.3	12.1	11.3	5.6	34.7
9. EDITING	24.0	20.0	28.0	18.0	8.0	32.0	2.0	12.0	12.0	14.0	6.0	26.0
TOTAL	13.4%	11.4%	15.9%	12.4%	13.0%	11.5 %	2.2%	9.3%	8.9%	8.3%	8.0%	51.1%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

We mentioned earlier, in our description of progressive coding, that references to skills could not accurately delineate a writing lesson. The observational data on skills gives additional support to our decision early in the project to describe writing instruction primarily in terms of activities rather than the objectives or skills addressed in each lesson. These data, shown in Tables 10 and 11, are clear evidence that there was no correspondence between skills and lessons. Table 10 shows the number of skills (FOCI) addressed in each lesson. The number ranges from zero to ten. Two-thirds of the lessons dealt with six or more skill categories.

In few cases was it possible to say that this was a lesson on capitalization (or paragraph sequence or punctuation, or any other assumed skill). Even when setting out to teach a specific set of skills (punctuation, for example), the teacher found it necessary to deal with a number of other skills during the course of the lesson. The skills that pertain to writing are interrelated to such an extent that it was not possible to teach one skill in isolation. This fusion of FOCI was true not only of lessons but also of single activities, as shown in Table 11. Only one quarter of all the observed activities dealt with a single skill category. Half the activities dealt with no skills; another quarter of the activities dealt with a number of skills at once.

Table 10

Number of Foci Addressed in Each Lesson

Number of Foci	Percent of Lessons (n = 60)
0	2%
1	5
2	7
3	5
4	7
5	14
6	12
7	17
8	22
9	7
10	3
	101%

Table 11

Number of Foci Addressed, by Activity

	NUMBER OF FOCI										
ACTIVITY	0	1	2	3	4	5	6	7	8	9	10
1. Presenting	43%	43%	10%	1%	1%	0%	0%	1%	0%	0%	0%
2. Giving Instructions	59	25	8	1	2	1	1	3	0	0	0
3. Orienting	77	19	3	1	0	0	0	1	0	0	0
4. Reviewing	42	34	10	4	4	1	1	3	1	0	1
5. Writing	50	20	12	5	1	4	0	4	3	1	0
6. Rewriting	67	13	0	0	0	7	0	13	0	0	0
7. Sharing of Writing	47	23	3	2	3	2	0	16	5	0	0
8. Evaluating	35	23	17	6	6	6	2	6	0	0	0
9. Editing	26	36	10	18	0	0	4	6	0	0	0
TOTAL	51	27	9	4	2	2	1	4	1	0	0

(Figures represent the percentage of occurrences of each activity which addressed a specific number of foci.)

Table 11 displays the number of FOCI addressed in the 957 activities that occurred during the last four observation cycles. We should call attention to an apparent discrepancy with reference to the activities of presenting and reviewing. Apparently these activities addressed no skill a high percentage of the time; actually they focused on a skill or set of skills. The continuation of each activity, however, often engendered changes in subscenes. A teacher would describe a concept and then cite models of it, and different MODES of modeling would often cause new PARTICIPANT groupings to change the subscene. These changes caused no problem to the observer when the activity entailed extended models, such as paragraphs, examples of sequencing, or rhetorical modes. But the modeling of punctuation, which occurred often, caused rapid changes in the subscenes. In these frequent cases the narrative part of the observation record confirms what was happening. The observer would cope with these rapid changes by noting only once the skill being addressed by this activity, not marking it again throughout the modeling phase of the activity. This apparent discrepancy in Table 11 offers yet another comment on the elusiveness of skills in the observation process.

The four kinds of categories that modify the activities of a writing lesson can accommodate a massive number of variables, far more than we have observed. But even our limited observations document differences among teaching strategies, and they deserve further exploration with new data. Appendix J contains tables corresponding to Tables 7, 8, and 9 for each teacher, i.e., the characteristics associated with each activity in each teacher's classroom. As these tables indicate, most inferable patterns also reflect diversity.

In the use of teaching MATERIALS, for example, there is an apparent pattern: one teacher used directive materials extensively; five of the eight teachers used no audiovisual, directive, or reading materials in conducting most of the activities; two of the teachers primarily used the students' writing as instructional material. The fact that most of these teachers make little use of directive materials is consistent with their reservations, already cited, about what is commercially available.

Also, in the teachers' use of participant groupings, similarity is qualified by diversity: six teachers spent most of their time with the whole class; the two other teachers, who spent most of their time with groups, made extensive use of these groups to teach reading as well as writing. Again, diverging emphases also marked the MODE of activities: five of the teachers spent most of the time in a "telling" mode; three in a "teacher question" mode.

Comparison of activities with observable characteristics also yields diversity, notably in the conduct of evaluating, which with writing, comprised a third of the observed instructional time. Evaluating was conducted primarily in a "telling" mode by three teachers, in a "teacher questions" mode by two teachers and in a "student questions" mode by two others. One teacher used a variety of modes. Five teachers conducted evaluating in a "teacher with student (serial)" grouping, that is, roaming among students and spending a minute or so with each; one teacher conducted this activity primarily with small groups of students; two others used a variety of groupings.

The FOCI of activities, represented as skills, show yet a different kind of divergence. Although the teachers' emphases on skills differed slightly during the year, these differences were not helpful in defining the way a teacher works. Moreover, the particular skills emphasized by each teacher were not related to any other differences in the classes. In sum, there was no relationship between the particular skills emphasized by any teacher and the teacher's grade level, type of student population, or teaching strategy (process or product). This lack of relationship recalls the conceptual problems that skills pose in the definition of the writing lesson, which we will turn to later in this chapter.

The recursive nature of writing instruction

This profile of writing instruction shows the kinds of variables that distinguish one writing lesson from another; in so doing it also illustrates the complexity of writing instruction in terms of the numbers and kinds of rapid decisions that teachers must make. There are countless options available to the teacher at every moment in the lesson, often among simultaneous activities. The rapid pace is evident from Table 4 which displays median subscene length. The possible options at each moment are manifest in two ways: the teacher may choose any of the nine activities at any point in the lesson, and each of the activities may be conducted in a variety of ways, as indicated by the subsets of characteristics associated with the activities.

The simultaneous occurrence of activities was common in most of the lessons that we observed; while a teacher was evaluating the work of one or more students, other students were writing, rewriting, sharing writing, or editing. But for two reasons we decided early in the project to track the teacher rather than the students; an observer cannot accurately track more than one target at any time, and since the activities are all teacher-directed, the teacher's behavior is crucial to the quality of the lesson.

The complexity delineated by this profile's activities and characteristics is systematic, not random; its ordering principal is that writing instruction is recursive. The teacher makes decisions throughout a lesson, but there is more to this recurrence than merely repetition. Decision-making recurs indefinitely until a specified condition is met; the process is recursive, like a structured loop in a computer program. The termination of a writing lesson does not end the loop; it merely interrupts the teacher's interaction with the students on behalf of some specified condition. As we will point out later, these teachers had strong notions of what those specified conditions should be.

The premise for our collaborative mode of research had been that if anyone could describe what teachers do, they could, and that premise turned out to be sound. The teachers knew instinctively about the recursive quality of their task, although it took us nearly a year to articulate it. Starting deliberately without a vocabulary, we intended to build one through observation, but again and again, as we all tried to pin down what was happening in the classroom, to define and delimit the components of the instructional process by discrete, precise terms, the teachers resisted closure in one respect. They sensed some elusive kind of continuity in this instructional task. Throughout the first four observation cycles, words like "reinforcing," "eliciting," "checking," "assisting," and above all "monitoring" kept appearing in our trinary minutes. We all agreed that the teachers were right in their sense of the task, but even so we could never codify these words. Although they were observable, these activities were virtually continuous and beyond our capacity to record. "Monitoring" was the most seductive, because it seemed to connote some sort of continuing strategy, but no one construct was able to designate this recursiveness. Rather, the whole system of constants and of variables, activities in various durations and with differing characteristics, was necessary to define this recursiveness in writing instruction.

Such indefatigable interaction could conceivably be a property of instruction in other subjects in the elementary schools, although we doubt that. For instance, Peterson and Clark (1978) found that teachers were continually evaluating the appropriateness of the students' response to what they were teaching in a social studies lesson. However, fewer than one fifth of these evaluations resulted in the teacher deciding to alter his or her teaching behavior. As we will describe later, data from our own study also indicate that instruction in other subjects is less responsive to student behavior than is instruction in writing.

There is a compelling reason for writing instruction to be characterized by a high level of interaction between students and teachers. The instructional effort is recursive because the process of writing is recursive. The teacher's decisions about how and when to interact are necessarily responsive to this process, which happens to be at a different stage of occurrence for each student at any given time.

The teacher's intervention in a student's writing process is essentially responsive; it addresses some immediate need of the writer which the teacher perceives. This response occurs most evidently in the cluster of activities comprised of writing, evaluating, editing, and it can occur during orienting. As Table 5 indicates, these activities comprised more than 50% of the observed instructional time in these classrooms. In discussing earlier the conclusions of each activity in a sequence, we spoke of "points of response" that confront a teacher during a writing lesson. Since so many of these response points pertain to some aspect of the writing process, the nature of this process -- and its demand on the teacher -- had best be clarified.

Among composition theorists, the writing process is presumed to be recursive. Our earlier definition of recursion will do here as well; it denotes a set of operations that can recur indefinitely until a specified condition is met. Crowley (1977) rejected a linear model of composing and posited a recursive one instead; Sommers (1978) refined the relationship of both models. And Flower and Hayes (1979) described categories of activities, which they called planning, translating, and reviewing, that comprise this recursive process. More explicitly, the recursion of composing appears to be a reciprocal process that entails two-phase cycles of apposing information and deriving inferences about it by making assertions (Van Nostrand, 1978). According to this inference model of composing, each phase engenders the other, just as in walking the movement of one leg forward both enables and necessitates a complementary movement of the other. Given any set of information, every assertion which attempts some closure is incomplete in a context of new information, which it has just caused to occur. This expanding process generates unfinished business, as it were, which the writer continually attempts to resolve. The specified condition toward which the writer works is some sense of repose, of satisfaction at having said what was intended in the way it was intended.

One cause of tension in the teacher's decisions about how and when to intervene in the writing process concerns this specified condition. It doubtless varies with every writer in every situation, and most writers typically do not recognize it until they have arrived at it. In the case of beginning writers this sense of destination may be easily preempted by some specified condition prescribed by the teacher, a situation that can be illustrated by visualizing one subscene in the writing lesson. Suppose that the students are writing and that the teacher is evaluating the texts by walking along a row of chairs and addressing one student at a time. The PARTICIPANTS are "teacher with a student (serial)." The teacher stops, glances at a text, and asks the writer about an error on the page. How many decisions might the teacher have made in this one transaction, even before the student answers? In evaluating a written text, a teacher may have to reconcile the conflicting priorities of two conditions that we just mentioned, one being the writer's sense of destination, as yet unexpressed, and the other being the teacher's or textbook's prescription that a skill or set of skills be demonstrated. If the text-in-progress reveals that the writer is not proceeding toward the prescribed condition, should the teacher intervene? If so, with what intent? If the intent is to support or enforce the specified condition, is that condition compatible with what is engaging the student? If it is, how should the teacher respond? If not, then how should the teacher respond? Here are five decisions to be made about merely one transaction in the *evaluating* process, and the student's response to the teacher's question may cause yet more decisions to be made about how to proceed with this transaction. If this student is one of, say, twenty-five students who are all writing at the same time, the teacher's points of response will be manifold.

The writing instruction in these eight classrooms repeatedly confirmed such responsiveness to students; it was contingent upon what the students were doing, upon what they were laboring at and achieving--or failing to achieve--at any given moment during the writing lesson. A teacher characteristically modified plans in order to speed up, slow down, or change directions, depending on the current need of the students as demonstrated by their questions or by their written texts. Dependent as it was on the recursive nature of writing, the instructional process in these classrooms is also necessarily recursive.

Because writing is recursive, mastery of any given structural constraint is not a realistic possibility within the scope of any one writing lesson. In the early part of the writing lesson the teacher characteristically assumes or identifies some need in the majority of students. If *reviewing*, relevant to this need, does not generate a positive response among the majority of the class members, for example, the teacher may have to abandon the review and shift to presenting information as if the students had never heard of it. Even after this activity has emphasized a given skill, that is, the control of a given constraint, the assigned writing in class may manifest other needs that the teacher must then address. Having engaged in presenting or reviewing constraint X, the teacher must necessarily respond, in evaluating, to usage or misusage of constraints T, Q, R--and also possibly X.

The responsive decisions which a teacher makes during writing lessons commonly modify, and sometimes drastically alter, the teacher's intentions regarding that lesson. Early in our study it was evident that "formal lesson plans don't communicate the planning process very well" (T 13). We addressed this discrepancy at an early plenary meeting by formally noting the teachers' goals and expectations (P, 12/15/79). The teachers caucused by grade level, and specified the performance that they expected of the students in September, with respect to writing skills, and the goals that they set for their students' performance by the following June. The result was the synthetic curriculum (Appendix E) that we cited in Chapter Three as demonstrating the circular tendencies of long-range plans. "Global statements of goals," we decided, "are not sufficiently accurate" to delineate instructional activities (P, 1/9/80), so we designed some daily log sheets;

the teachers agreed to record after the fact what writing instruction -- if any -- had occurred each day in the classroom. They would select the significant details of their lessons; and their logs would provide us all with a set of records rather than testimonies of intention.

The teachers kept logs throughout the last six observation cycles, as described in Chapter Two. These records did indeed reveal what the teachers had done about writing instruction, but, with few exceptions, the logs revealed nothing at all about how the teachers had gone about their tasks.

The following excerpts from the teachers' logs illustrate the emphasis on product evident in the logs.

> 1/22/80 "Structure of a sentence - noun, verb, adj."
> -grade three
>
> 3/5/80 "Wrote adventure story using Snoopy as main character."
> -grade four
>
> 2/14/80 "Write similes and metaphors."
> -grade five
>
> 5/5/80 "Wrote sentences using contractions."
> -grade six

The log entries were typically product-oriented, with virtually no mention of the process that the teachers had engaged in, even though we were regularly observing process and systematically discussing it. Some entries did address the teaching process; for example, this entry of a grade six teacher:

> 2/6/80 "Pupils' story books were read to first and second graders - my pupils then discussed need for a perfect product and an awareness of audience."

Such entries, however, were in the minority. By and large, these logs yielded records of teaching that were markedly different from the observation records. But they shed no light on process. Years of experience with the constraints on writing instruction had evidently conditioned the teachers to think of this enterprise in terms of writing outcome. In this sense, these daily logs were remarkably similar to the global curriculum that we had constructed. Both kinds of records were comprised of goal-oriented statements, yet from neither set were we able to relate a planned occurrence to the actual occurrence. Evidently too many decisions had intervened.

In general, the discrepancy between plans and behavior appears to be a function of training. Our teachers were used to keeping records according to conventions that are now outdated. The conventional notions of planning were described earlier in this chapter (pp. 80-81), but the subject of these logs invokes them again, especially their contradition by actual teaching behavior. According to conventional notions, teachers are supposed to decide first about objectives, or skills, and then plan activities accordingly; however, recent studies indicate that teachers think about content and activities first, and then, if at all, consider objectives or skills. The observed behavior of our teachers in the classroom corresponded more closely to these recent findings about the priority of activities than to the priority of objectives which their logs reveal. Their observed behavior, reflecting their perceptions of student needs, entailed changes in the pace and direction of their instructional activities. Such flexibility in decision making has been applauded by Clark and Yinger (1980), who claim that "design is the principal mark of professional activity . . ." and that "teacher planning might best be represented as an intuitive design process" (p. 14).

This intuitive design process entails many decisions between the lesson plan and the end of the lesson. These intervening decisions are roughly like those of a navigator at sea. It is prudent to head for a given destination at a planned course and speed, but without an absolute fix on the ship's position at all times, the navigator necessarily proceeds by dead reckoning. Inevitably, the dead reckoning position is at odds with the ship's actual position at any given time. Navigators commonly refer to this inevitable discrepancy as "drift"; it results from a combination of uncontrollable forces and from a set of responsive decisions intended to exploit or to counteract those forces in arriving at the planned destination. At sea it is necessary to change course and speed periodically to accommodate for drift. Teachers' intentions before a writing lesson and their decisions en route are aptly characterized by the navigator's strategy.

Some Implications of This Analytical Model

This model for analyzing writing instruction was tested in several ways. As discussed earlier, we certified the validity of the activities constructs. Also, using the whole model, we assessed the reliability of our observations on two occasions, and we observed lessons in subjects other than writing. Both kinds of assessments bear implications for further research.

The reliability of the observers was tested on two occasions. The procedure in both sessions was the same. A videotaped writing class was shown to all thirteen coders. Inter-rater reliability was established by comparing the codes of individual observers with the "correct" codes, which were established by consensus after the coding session. In the first session, the inter-rater reliability was low -- only 65% of the subscenes in the videotape were correctly identified by the aggregate of the thirteen coders. The major problem was detecting changes in subscenes. The labeling of subscenes (i.e., attaching an activity code to the subscene) was more accurate; labeling errors accounted for only one-third of the total miscodes. After this reliability conference, the definition of a subscene was changed. A subscene was now defined as consisting of an activity and a group of participants. Thus, a new subscene would begin only when the activity or the participants change. (Formerly, changes in topic or speaker also indicated changes in subscenes.) The revised definition was more accurately observable because it was closer to the teachers' sense of what constitutes an activity. In the second reliability conference, using the revised subscene definition, the thirteen coders correctly identified 80% of the subscenes. Again, failures to detect subscene changes were responsible for two-thirds of the miscodings, but there were fewer such failures, resulting in the higher reliability.

We achieved acceptable reliability primarily because of the constructs; the definitions of the activities constructs were stable and precise; each of the characteristics, as defined, was self-evident, and the vocabulary of the grid reflected the way teachers talk about writing. Every item on the grid was observable, which was another factor in reliability; with each new version of the grid we rigorously omitted what we could not see. A third factor was the redundancy of the grid; the narrative and the system of check marks audited each other. All of these factors of the model made low-inference observation possible, and all were results of progressive coding.

Another way of assessing the model was to use it to observe classes -- not necessarily lessons -- in subjects other than writing. During cycle #10, four NP observers visited eight classes in five schools: three classes in mathematics, two in art, and one each in reading, science, and social studies. With minor changes of obvious labels, the model could distinguish between writing instruction and the instruction in these classes.

We noted the significant similarity and differences between these classes and the classes in writing that we had observed. One obvious difference was the relatively short duration of these classes as compared to the writing lessons; the other differences lay in the proportionate use of the nine activities. Giving instructions and reviewing were common to all eight classes, presenting was common to all but one, and evaluating, to five of the eight. But five of the nine activities of writing instruction occurred either rarely or not at all in these classes, and those that did occur were often of a different nature. Table 12 displays the occurrence of these activities in the eight classes.

Table 12

Activities in Eight Lessons in Subjects Other Than Writing

ACTIVITIES	Math, grade 3	Math, grade 4	Math, grade 6	Reading, grade 6	Social Studies, g. 5	Art, grade 4	Art, grade 5	Science, grade 6
1. Presenting	x	x	x	x	x	x		x
2. Instructions	x	x	x	x	x	x	x	x
3. Orienting		(x)	(x)			x	x	x
4. Reviewing	x	x	x	x	x	x	x	x
5. Writing		x	(x)				(x)	(x)
6. Rewriting								
7. Sharing	(x)							
8. Evaluating		x	x		x	x		x
9. Editing					x		x	

Analyzing these differences in a plenary meeting (P, 5/31/80), we summarized further evidence of the uniqueness of writing instruction.

1. The outcome of the lesson is generated either chiefly or wholly by the students. They do not merely supply information in the blank spaces of some context that already exists.
2. There are no exclusively right answers in writing as there are in math, for example, and to some extent in reading and in science. The fact that there are many possible outcomes of a writing assignment requires that evaluating and editing take longer. Also, the existence of right answers in many subjects precludes the use of sharing in most lessons in those subjects.
3. There are few texts or other teaching aids for elementary-grade teachers that are specifically designed for writing instruction. The teacher must convey concepts through home-made materials or through the activities of presenting, giving instructions, orienting, reviewing, and evaluating. In particular, the teacher's activity of orienting is typically more expansive in writing instruction than in other subjects. While orienting does occur in other subjects, it seldom takes as much time or plays the same important role as in writing instruction.

The obvious conclusion of this assessment is that writing instruction is significantly different from instruction in other subjects in the elementary school curriculum, and this conclusion suggests a simple line of reasoning: models of effective teaching in other subjects are not appropriate for writing instruction; any systematic improvement in writing instruction must evolve from the context of writing instruction; the design for such improvement should be based on what teachers actually do and framed in terms of how they perceive what they do. And collaborative research has the capacity to derive such information. These are the assertions that we will address in Chapter Five of this study.

Chapter Five

Toward the Design of Writing Instruction

The final question that we raised in Chapter One--How can collaborative research be used to design effective writing instruction?--implies that "effectiveness" can be validly defined, that the design task is feasible, and that collaborative research has a role in the achievement of this task. Our findings, represented in Chapter Four, confirm these implications. The present chapter frames those findings, along with some others that our study has generated, in a context of research that lies ahead.

Writing instruction is problematic largely because it is far more complex than it is generally thought to be. The widespread misunderstanding of writing as a process was addressed in Chapter Three, which points up a failure to heed what the process really entails for the writer. Unlike other subjects in the curriculum, writing requires the students to generate substance and also to frame it--even more, to frame it recursively while generating. And the complexity of the instruction that is so misunderstood lies in the responsive nature of the teacher's interaction with the individual students at their tasks. Writing instruction is a recursion, as Chapter Four points out. Intervention in the recursive writing process is contingent upon the aspect of that process which happens to engage the individual student at any given time. Simultaneously many students are engaged by different aspects of writing, so the teacher's points of response are manifold and often unpredictable.

Effective writing instruction can be operationally defined in terms of this tactical urgency in the classroom. Effective writing instruction is the teacher's consistent interaction with the students at all points of response so as to yield optimal outcome at each point; the outcome will be some aspect of the student's learning behavior. This tactical urgency, however, cannot be consistently accommodated--that is, the teaching process will probably not be effective--merely by the teacher working intuitively. Some comprehensive support system is needed to furnish reference positions to guide the teacher's rapid changes from one point to another; as long as those changes are _ad hoc_ in nature , the effectiveness of the teaching will remain in doubt.

Consistency of the appropriate response is the important concept here. Good luck and intuition will always be crucial to an optimal outcome. But even the best of teachers can run out of luck, and intuitive hunches usually require confirmation of some sort before they can be carried very far. The analogy that we drew earlier about the teacher at sea, like the navigator changing course and speed to compensate for drift, for the inevitable errors of dead reckoning, suggests the nature of the support system that is needed. The navigator can normally count on compass, charts, and tide tables to help in planning the voyage and in correcting the ship's position en route. These instruments are the means by which the navigator plans. Used in conjunction they constitute a support system; they provide a capacity for planning and also for changing plans consistently.

One major sign of effective writing instruction is the teacher's capacity to generate long-range plans that are relevant to tactical changes in the classroom. This chapter addresses tactical decisions and long-range plans, and it posits some possibilities of linking the two into some kind of support system for the teacher. Since the teacher is engaged in making rapid decisions at every point of response, a thorough knowledge of how these decisions affect the teacher's basic activities would be desirable. How can those activities be assessed? What is the optimal outcome of each? Once these outcomes are discerned, the limits and possibilities of each activity can be determined, thereby furnishing the teacher with a set of constant references for the recursive movement from one point of response to another. We will briefly consider an assessment process for the activities that we discovered in the model of writing instruction described in Chapter Four.

Since the needs and abilities of the students determine the teachers' tactical points of response, it seems reasonable that they also inform long-range plans for writing instruction. When these needs and abilities can be defined more precisely than they now are, we can expect the design of a scope and sequence that will be more useful than the present curricular guidelines. Some of the data that we derived from this study appear to be relevant to the definition of students' needs and abilities and therefore to the design of a scope and sequence. These data pertain to the writing outcome from this study. The students' texts reveal certain patterns of control and lack of control over various constraints in the writing process. These patterns suggest the possibility of identifying growth factors that might influence curricular design. We will describe these patterns and their implications for scope and sequence.

Still other kinds of information about students will be pertinent to long-range, curricular planning as well as to the tactical classroom situation, and possibly to the linking of the two. Some of the data derived from this study concern correspondences between patterns in the writing outcome and other characteristics of the student population, including grade level, socioeconomic status, gender, reading and math scores, and writing at home. The students' concepts of writing and their attitudes about themselves as writers were also derived from this study and are also pertinent to instructional design. Negative findings as well as patterns should be useful in this respect, since they contradict some familiar assumptions about students' needs and abilities. These various characteristics and their correspondences we will also address. But first, in the local classroom situation, there is more to be considered in the assessment of the basic activities of the teacher.

Assessing the Activities of Writing Instruction

The model of writing instruction derived from this study is not definitive. It can, and should, sustain further testing; in particular, each of the nine activities could bear scrutiny by further progressive coding. With further observations in a different setting, a team of teachers and researchers might determine the rationale of each activity (its purpose and function), its desired outcome, and ways of measuring that outcome.

The first concepts to be tested would probably be the supposed purposes of an activity. If that activity were orienting, for example, these might be some possible purposes: "to help the students generate ideas"; "to make links or connections among pieces of information"; "to frame these linked pieces of information into successively larger categories of information." As they stand, such concepts are too generalized to be precisely descriptive, but progressive coding of observed behavior could delineate them. Another activity, sharing writing, might serve these purposes: "to provide models which can guide students in creating their texts" or "to reinforce a student's pleasure in self-expression." (Students would probably not share mathematics exercises for this purpose, for example, since they would not have generated the math structures themselves.) Again, these supposed purposes are too generalized as they stand, but progressive coding of observed behavior could refine them.

Once consensus is achieved about the purpose of an activity, it should be possible to design criteria for judging the effective use of that activity. Such criteria might be derived from questions such as these: In _reviewing_, for example, does the teacher furnish a new context for old information or define additional attributes? Either outcome of _reviewing_ would presumably be desirable. On the other hand, does the teacher blur information or cause an information overload? In _evaluating_, does the teacher allow or encourage questions to occur? Which does the teacher do, prescribe revision or encourage a student's participation in that process? Similarly, in _orienting_, which does the teacher tend to do: establish links among the ideas generated by the student, or encourage the students to establish such links?

Effective writing instruction as we have just defined it is a function of a teacher's responses to differing needs of students at any given time; each interactive episode between teacher and student offers the teacher an opportunity to respond to some need. While coding the purpose and the optimal outcome of a given activity, therefore, an observation team might want to address these needs in different ways with questions that focus on points of response. Is the teacher aware of some need in the individual student at that point? Is the chosen activity appropriate to the perceived need? Some activities are appropriate to the fulfillment of a specific need; others are not. A student engaged in *editing*, for example, can normally be guided by *evaluating* questions, and a student who has come to a halt while *writing*, because he or she is trying to clarify ideas, might need further *orienting*. But this latter student would not profit from *evaluating*, which focuses on skills, rather than on generation of ideas.

Does the teacher change from one activity to another to accommodate a given need? This question might also help an observation team to test the activity constructs and possibly make them more helpful to teachers. Since a teacher's flexibility in this regard would be desirable, the definition of each activity must be precise enough for the teacher to perceive the nature and the significance of the change from one to another. For example, while *reviewing* a concept a teacher might realize that the students are not at all familiar with it and therefore decide to stop *reviewing* and start *presenting* the subject as if it were new information. What is the optimal outcome in such a case? When should the teacher make the change? An experienced teacher might know; but teachers in training might need a more stable reference in the form of constructs for *reviewing* and *presenting* that distinguish more elaborately between each other than ours yet do.

These are the kinds of questions that could appear on the agenda of an observation team committed to testing and developing this model of writing instruction. Once the activity constructs have been tested in a different setting, some of the characteristics would probably need to be repaired. Had the school year been longer, we would have continued to test and repair some of these constructs. But naming a priori emphases for progressive coding might be too limiting. Simply testing the model in a new setting would doubtless reveal those aspects of it that need to be developed in order to yield a stable set of references for the teacher.

Writing Outcome

One element in the design of effective writing instruction is a scope and sequence for long-range planning. We analyzed the writing outcome of the students in this study for patterns that might pertain to this element. And we had in mind a series of leading questions. Does writing instruction need to be a continuum of repeated reviews for each student? What are the growth factors that might determine or modify a curriculum? When is the writer ready to learn to use new constraints? Which ones can the students be expected to master, and at what stage? Which ones will require reviewing in the long-range scheme? The patterns that we derived from the error analysis indicate some directions for research. We list patterns with a brief gloss about each.

The results of our extended analyses are not definitive; they cannot be generalized because of the relatively small populations involved (some fifty students at each grade level). Yet the size of the sample--some 305,000 words in more than 2,700 texts--justifies scrutiny of the patterns we discovered. In general, our findings indicate that the interpretation of writing outcome is a complex activity. Moreover, any attempts to evaluate teaching effectiveness based merely on writing outcome, unless such attempts are subject to careful interpretation, may well be misguided. But these findings do provide useful information to anyone wishing to study writing outcome as it relates to the scope and sequence of writing skills.

Our research design entailed the analytic assessment of texts written by students in each classroom throughout the year and also an extended assessment of a subset of those texts according to a variety of descriptors. Chapter Two explains the system of codes that we used for analyzing a text according to its use and misuse of conventional constraints. Developed by the Center for Research in Writing, this descriptive system was already in place at the beginning of this study. Derived by progressive coding through the efforts of teachers and researchers over a four-year period, this coding system provides an error analysis with reference to conventionally acceptable prose. Profiles derived by this model yield patterns in the writers' control of both linguistic and rhetorical constraints. Table 2 of Chapter Two is printed here for reference to the codes defining these constraints, and

Appendix K displays the patterns.

Our extended assessment entailed a variety of descriptions, including Hunt's "T-units" (1965), a modification of the cohesive devices outlined by Halliday and Hasan (1976), the measurements of growth in writing suggested by Odell (1977), and a search for patterns in the use of nouns, simple modifiers, and verbs. This multiple assessment was intended to audit the error analysis of these texts and, if possible, to provide other ways of describing patterns in writing. The results of these analyses appear in Appendix K.

Table 2

Twenty-one Constraints (and their absence or misuse) Used in CRW's Profiles of Writing

Structural Unit	Code	Name
Paragraph	1	(no) organizing idea
	2	evidence (missing)
	0	one-sentence paragraph (undeveloped)
Paragraph Sequence	3	(no) forecast
	4	(lack of) sequence between two paragraphs
	5	(no) conclusion
	6	reader (not addressed)
Sentence	F	(fragment of) complete sentence
	SV	subject-verb (dis)agreement
	V	verb form or tense (misused)
	Ct	complement (inexact)
	C	(faulty) compounding
	W	wrong word choice
	D	diction (causing syntactic fracture)
	J	joining independent clauses (unconventionally)
	A	(inaccurate) punctuation demarcating phrases and clauses
	PC	phrases and clauses (misused)
	R	referent (not clear)
	T	(inaccurate) terminal punctuation
	Q	(inaccurate) use of quotation marks around quoted discourse
Word	Sp	(mis)spelling

The patterns derived through error analysis indicate that extensive research remains to be done before any conclusive statement can be made about growth factors in the writing process. Of the twenty categories of constraints on writing that we studied, the students achieved increasing control over only five; in the remaining categories, progressive control was either uneven or nonexistent. These five constraints are the complete sentence, terminal punctuation, spelling, word choice (vocabulary) and diction (acceptable transformations). These patterns suggest that students are ready to learn these constraints as soon as they begin writing and that teaching usefully reinforces such learning. Our teachers allotted extensive instructional time to the complete sentence, terminal punctuation and spelling; they allotted a moderate amount of time to word choice and diction.

Control over four other constraints (verb form, joining independent clauses, punctuation of phrases and clauses, and compounding), however, was unevenly achieved. In grade four the error rate peaks, that is, students make more errors per sentence with these constraints in grade four than they do in any other grade. However, the profiles also indicate that after the initial high peak in errors, they achieve increasing control over these constraints. This peak could indicate that the students first encountered these constraints in grade four and that learning at first entails a high error frequency. This inference is supported by the error pattern for quotation marks, wherein the errors peak in grade five, rather than in grade four. Again, our teachers were emphasizing this constraint in grade five.

In the profile of one constraint, the one-sentence paragraph, errors peak and fall twice. The constraint in this case is that a paragraph presents both an organizing idea and supporting evidence, no matter how many sentences it contains. The characteristic error in the one-sentence paragraph is its lack of evidence to support the assertion that it makes; it might do as a sentence but not as a paragraph. The error pattern in this case, wherein errors twice peak and fall, suggests the achievement of control over this constraint in two different contexts or in two different modes of writing presented to the students at different times. Students may learn to write paragraphs of more than one sentence when they are first learning to write paragraphs; then they may lose some control in this category when they first learn to write paragraph sequences.

Control over four constraints (phrases and dependent clauses, organizing idea of a paragraph, evidence, and sequence, that is, paragraphs that link) neither progresses nor regresses during grades three to six. This pattern suggests that students need constant monitoring in their use of these structures. It is possible, for example, that students in these grades cannot control the constraints applicable to paragraph coherence, that at this stage of their development, each paragraph may present a unique conceptual problem.

Control of two constraints (forecasting and concluding) decreases as grade level increases. This pattern suggests that as the writing task becomes more complex, students find it more difficult to summarize what they have said. As the chart in Appendix K (p. A133) indicates, students in grade five appear to have mastered forecasting, but errors rise again in grade six. This increase may indicate that expressive writing (assigned more often in the lower grades) is easier to forecast than transactional writing and that as the task becomes more difficult, students do not as readily achieve control over their forecasting. Conclusion errors, on the other hand, increase steadily as grade level increases, indicating that writing an acceptable conclusion may be an inherently difficult task, regardless of the mode of discourse (see p. A135).

Many of the patterns evident in these profiles indicate that errors need not be regarded as signs of lack of growth. This possibility is particularly evident in the graph of subject-verb errors. In their efforts to achieve subject-verb agreement, the students in this population gained increased control during each summer and then lost control during each school year. This error pattern may indicate that within each school year students do attempt to relate increasingly complex subjects and verbs but that they do not immediately achieve control. In this case, as in all of the other patterns that reveal uneven gains in control, errors may well be growth indicators. This notion was the most radical and engaging proposition that the eight teachers entertained during our study. In a final questionnaire, when asked what aspect of the study should be distributed to administrators and to other teachers, they responded unanimously with this concept of errors in the written product as possible indicators of growth in the writing process.

The variance among these patterns is rich with possibilities, but it also makes the analytic assessment of writing vulnerable to misinterpretation with serious consequences. One such misinterpretation would be the summative evaluation of a teacher based on errors in the students' written texts. As tempting as it might be, such a judgment would be simplistic; it would imply that error frequency in a group of texts is a precise measure of instructional quality, which it is not. The analytic assessment of writing that we conducted in no way supports the evaluation of teachers by the errors in students' written texts. There are too many variables between the instructional input and the writing outcome to justify the misguided assumptions that such a judgment would imply.

Any judgment of instructional quality based on error frequencies in the writing of these particular students, for example, would need to account for two apparently contradicting patterns. Students in grade six made fewer errors in sentence fragments, terminal punctuation, spelling, word choice, and diction than did students in grade three; so far so good. But they made more errors in concluding than students did in the earlier grades. Were the sixth-grade teachers effective or not? How can these two patterns be reconciled? Might some of these errors have decreased naturally, no matter how well or poorly a teacher had intervened? Might other errors have increased as the assigned tasks became more complex?

Other patterns in error frequency raise more unanswered questions. With respect to some of the twenty constraints in this assessment, for example, students in some grades improved while students in other grades did not. One might assume that, based on this evidence, some of these eight teachers taught more effectively than others; so far, so good. But in the category of subject-verb agreement, as already indicated, the students in each grade regressed during the year, making more errors in May than in September. By the same logic one would have to conclude that the writing instruction in all eight grades was ineffective.

Yet such a conclusion could scarcely explain two of the other patterns across grade levels that were just mentioned. The error frequencies peak at grade four with reference to joining independent clauses, punctuating phrases and dependent clauses, and compounding, and errors in quotation marks similarly peak in grade five. How could the allegation that teachers are ineffective at all grade levels square with these patterns? Obviously some other explanation must account for them. Our likely explanation is that these students were learning these structures for the first time, or possibly, with the guidance of their teachers, trying new structures.

Even more unknown variables intrude as soon as an error analysis of a student's writing is compared to some instructional goal, such as a teacher's stated intention, a record of instructional emphasis, or a segment of observed behavior, all of which we compiled. Examples of such unexplained discrepancies appear in Appendix L, which displays correspondences between (1)each teacher's emphasis on each of seven skills, as reported in their logs of writing instruction and (2)changes in the error analysis pertinent to these same skills. The comparisons yield two kinds of correspondence: direct and inverse.

The records of four classrooms exemplify in the extreme both types of correspondences that occurred in all of the classrooms. In the case of Teacher E and Teacher H, the correspondences are direct. The histogram showing changes in control over each skill is virtually identical to the histogram showing the teacher's emphasis; students made fewer errors in the skills emphasized by the teacher. In the case of Teacher D and Teacher A, however, the correspondence is inverse. The histogram showing changes in control is almost the reverse of the histogram showing the teacher's emphasis; students made more errors in the skills emphasized by the teacher.

Can we conclude, therefore, that Teachers E and H are effective teachers and that Teachers A and D are not? We think not, for three reasons.

1. Error analysis can describe conventionally acceptable writing; it does not describe "effective writing" or "writing of high quality"; no measurement system yet devised does so. (Teachers A and D might be challenging the students to attempt more sophisticated structures. Teacher D, for instance, spent a great deal of time encouraging students to find more accurate or sophisticated words, the skill in which Teacher D's students showed the largest decrease in control.)
2. When students first learn a new concept or skill, errors increase. (Therefore, the students of Teachers A and D might be making more errors because they are attempting to learn something new.)
3. Teachers' stated intentions may well not account for all the skills they address in the classroom. (For example, a teacher might record in a logbook the skill emphasized during the activity of presenting, but not record other skills addressed during reviewing or evaluating because there happened to be so many of them. The teacher might, therefore, be teaching these skills during activities other than presenting. In the case

just mentioned, Teacher D actually did spend a great deal of time evaluating writing with individual students.

To extend the assessment of writing beyond error analysis, we searched for other measures of writing outcome. As part of our research design, these other measures were described in Chapter Two. Our findings may be useful to researchers in that they either corroborate earlier findings by others or suggest new means of assessing writing:

1. The measures of T-units, derived from Hunt's (1965) study, did indicate growth across the four grades, but no consistent pattern within grades. (See Appendix K.)
2. The four cohesive factors, derived from the work of Halliday and Hasan (1976), yielded mixed results. Neither "ellipses" nor "substitution" revealed any patterns in writing behavior within the four grades levels. "Referents" indicated some variance in progression throughout the grade levels. And "conjunctions" yielded clear and consistent indications of improvement across grade levels. The findings for both "conjunctions" and "referents" confirmed the findings for related indicators--codes "J" and "R"--in the error analysis. (See Appendix K.)
3. The usage of nouns, simple modifiers, and verbs yielded no patterns. With reference to nouns, the texts were contaminated by teachers' assignments that

specified the use of certain words. There were no indicative patterns in the use of adjectives or adverbs. And, although we pursued Loban's (1976) notion that the use of specific verb forms might indicate growth, our study of verbs yielded no pattern in either tense or verb form.

4. None of the five indicators of growth in writing, as defined by Odell (1977), yielded patterns, but this may be the result of the population studied here and the particular assignments they addressed.

In sum, these other descriptors yielded not much new information. But they furnished a useful audit of the error analysis, insofar as their yield was compatible with the patterns derived from this procedure. The patterns of change that we observe thereby are clearly discernible, even though they cannot be generalized because of the relatively small population involved and the relatively brief duration of the assessment. We conclude, therefore, that error analysis used in longitudinal studies would reveal growth patterns and make possible a scope and sequence based on the natural development of writing abilities.

Writing Assignments

Since writing assignments are obviously a part of a teacher's plans, they are relevant to the design of effective writing instruction, and the study did develop some information about writing assignments. During the school year the eight teachers generated 170 writing tasks, and the responses to

137 of those tasks became the texts that we analyzed. Although our gathering of these assignments was systematic, it was in no way prescriptive. The teachers separately assigned the writing tasks according to their own instructional goals and schedules, as appropriate to our naturalistic mode of inquiry. Even the forms of the assignments varied according to the teachers' notes accompanying the texts that we gathered. For the purpose of reporting we normalized the syntax of these assignments, which are contained in Appendix B. But this apparent uniformity should not be misconstrued; these assignments do not represent any kind of formal sample.

Even this informal set of assignments, however, yields patterns related to the modes of writing and to the different conceptual demands inherent in these modes. The mode that James Britton defines as "expressive" entails a kind of language that reveals the writer's thoughts and feelings. In Britton's study of London schools (Britton et al., 1975), he laments that this mode was not often assigned, since he believes that expressive writing effectively engages unskilled writers and may prepare them to master more challenging modes: transactional, a reader-oriented mode, and poetic, a text-oriented mode. Britton's findings have been corroborated by Whale and Robinson (1978), in their study of writing in schools in Saskatchewan, Canada.

In contrast to the findings of these earlier studies, the assignments in this study clearly indicate that our teachers both valued and encouraged expressive writing. In their first trinary meeting, both third-grade teachers affirmed

Table 13

Writing Assignments Coded in the Study

Teacher	Expressive Writing	Transactional or Poetic Writing	Total Assignments
31	14	1	15
32	16	2	18
41	6	11	17
42	12	3	15
51	8	7	15
52	8	10	18
61	7	14	21
62	9	9	18
Totals	80	57	137

that "at the third grade level, expressive writing is to be encouraged," (T1). And both fourth grade teachers concurred, stating that students "should begin with their own experiences" (T8). Moreover, the modes of writing assigned at each grade level document the value that these teachers placed on expressive writing. Their assignments are listed by mode in Table 13. As this table indicates, many of the assignments at each grade level are subject-oriented or writer-oriented, modes which are expressive in that they focus on what a writer thinks or feels about a subject.

Table 13 also indicates that besides expressive writing, both transactional and poetic modes were assigned. The teachers apparently recognized that young children may not be able to handle the constraints inherent in the transactional and poetic modes, whereas older students can. In any case, the assignments become more reader-oriented or text-oriented as the grade levels progress. Although classroom #41 appears to contradict the pattern described here, the high proportion of transactional or poetic assignments in that class can be explained by the fact that Classroom 41 was composed of both advanced and gifted students.

Related to the pattern of modes derived from these assignments is the evidence of tasks which make increasingly difficult conceptual demands on the writer. Listed here in pairs for comparison, the assignments are numbered as they are in Appendix B: The first two figures indicate the grade level and classroom and the last two identify the assignment.

32-39	Given a picture, describe it.
62-15	Given three pictures of your choice, in the Providence Journal, create a short story based on them.
31-11	Given a movie on what kids want to be when they grow up, write about what you want to be.
51-20	Given readings and movies about Paul Revere, explain why Paul Revere made his ride.
31-06	Given the story, "The Sorcerer's Apprentice," write about it.
51-09	Given a book of your choosing, write a book report.
32-28	Given an activity done in class (making a newspaper tree), describe the activity.
62-45	Given a process of your choice, describe "how to."
31-17	Given the subject, kites, write a story imagining you are a kite.
51-23	Given to imagine that you inhabit another planet, describe yourself in terms of the influence of the gravity and the temperature of the planet.
52-20	Given the imaginary situation of being a Christmas present, write about what you would be and what would happen.

Further studies might corroborate the presumed value of expressive writing; that is, they might determine whether or not early tasks in this mode help students to write more effectively at a later time than if they had been assigned tasks in the transactional mode. Such studies might also usefully focus on the value of assignments which place increasing cognitive demands on students. Since writing involves the mastery of many constraints from the merely mechanical, such as punctuation, to the conceptual, such as reader awareness, studies focusing on progressive control of constraints could provide useful knowledge for teachers.

Student Characteristics and Writing Ability

One set of tasks in this study entailed our identifying several kinds of student characteristics and juxtaposing them with the writing outcome. We identified five characteristics for this procedure: a student's grade level, socioeconomic status, gender, scores in reading and in mathematics, and also writing at home. This section of our findings reports the correspondences that we discovered. Significantly, the derived data support the teachers' insights about the effects of these various characteristics on writing ability. As they insisted, grade level is either unrelated to writing outcome or related so imprecisely that it appears to be of little use in developing a scope and sequence for progressive control over the constraints on the writing process. Socioeconomic status and gender also appear to have little effect on students' abilities. The three other characteristics, however, were significantly related to changes in the error patterns of the writing outcome. One characteristic is ability in reading, another is ability in mathematics, and the third is writing at home. But these correspondences are qualified. The first two correspondences, between writing outcome and reading or math ability, as the teachers also insisted, need not be a fixed determinant, since these abilities are subject to modification. The third correspondence, between writing outcome and writing at home, reveals a relationship but no clear direction of causality. Which one influences the other?

Although the grade level of students might appear to be of major importance to writing instruction, our data indicate otherwise. (Means and standard deviations of the error categories, by grade, appear in Appendix K.) These data reveal that students progress unevenly in their mastery of specific constraints, so it is not possible to decide at what grade level a specific constraint has been mastered. These same data also indicate that a high variance of performance exists within each grade level. Because of this high variance, teachers cannot assume that students in a certain grade can control certain constraints in writing but not others. Longitudinal studies may eventually determine a scope and sequence appropriate to the teaching of constraints, but the range of ability in each grade level will still require that teachers tailor instruction to the individual student.

With reference to socioeconomic status, our data fail to support another familiar assumption. They indicate that SES has little effect on a student's writing performance. When this variable was compared to writing outcome according to the twenty codes in our error analysis, nineteen of the codes yielded no significant correlation. Only one of the codes, the organizing idea of a paragraph, was significantly related to SES. There was a negative correlation ($-.22$, $p < .001$) between SES and organizing idea, indicating that lower SES students made more errors in the organization of paragraphs than did higher SES students. However, this was the only difference in error frequency between the two groups. (All correlations reported in this chapter are Pearson product-moment correlations.)

Comparisons between gender and kinds of error in writing yielded similar, negative conclusions. When gender was correlated with the error analysis of the students' writing, only one of twenty codes correlated significantly with gender; girls made fewer spelling errors than boys (6% error rate versus 8% error rate, $p < .05$). Moreover, even this correlation might not hold up; since we juxtaposed gender with twenty separate codes, the significant difference in any one of them might have been due to chance.

Three student characteristics, however, were significantly related to error analysis. Two of these were reading ability and mathematics ability, as measured by standardized tests. Standardized reading scores were available for students in seven of the eight classes (one of the fourth grade classes did not take a standardized reading test). Analyses by grade level indicate that significant correlations exist between reading percentile and as many as thirteen of the twenty-one codes in the error analysis. In each case, the higher the reading percentile, the fewer the errors in each category of writing errors. These correlations are shown in Table 14. As the table indicates, moreover, the number of significant correlations increases as the grade level increases: two correlations at grade three, eight correlations at grade four, nine correlations at grade five, and thirteen correlations at grade six.

Standardized test scores in mathematics were available for students in six of the eight classes. (Neither fourth grade class had taken a standardized mathematics test.) The significant correlations between these scores and the error analysis scores are shown in Table 15. The correlations follow the same pattern as the correlations between reading scores and writing errors. The number of significant correlations increases with increasing grade level. The fact that these correlations are as high as the reading-score correlations raises some interesting questions. Both sets of correlations may be due to the general "school-wiseness" of some students, which is manifested in their writing as well as in their standardized tests. Or it may be that the skills which are useful in mathematics are also useful in writing. This second possibility should be pursued further.

Table 14

Significant Correlations Between Reading Percentile and Error Analysis Scores by Grade Level*

Error Category	Grade 3	Grade 4	Grade 5	Grade 6
Organizing Idea				
Evidence		-.37	-.35	-.59
One-Sentence Paragraph		-.44		
Forecast				-.47
Sequence				-.38
Conclusion				-.46
Fragment				
Subject-Verb	-.35	-.40	-.39	-.38
Verb	-.45	-.50	-.72	-.47
Complement				
Compounding			-.48	
Word Choice		-.54	-.54	-.47
Diction		-.42	-.48	-.56
Joining			-.59	-.58
Phrase and Clause Punctuation				
Phrase and Clause				
Referent			-.38	-.56
Terminal Punctuation		-.46		-.40
Quotation Marks				-.62
Spelling	-.53	-.51	-.46	-.54

* $p < .01$ or less

Table 15

Significant Correlations Between Mathematics Percentile and Error Analysis Scores by Grade Level*

Error Category	Grade 3	Grade 4**	Grade 5	Grade 6
Organizing Idea				-.65
Evidence				
One-Sentence Paragraph				
Forecast				-.62
Sequence				-.42
Conclusion				-.51
Fragment				
Subject-Verb				-.37
Verb	-.40		-.52	-.41
Complement				
Compounding			-.39	
Word Choice			-.44	-.51
Diction			-.35	-.51
Joining			-.42	-.59
Phrase and Clause Punctuation				
Phrase and Clause				
Referent			-.41	-.41
Terminal Punctuation	-.33			-.57
Quotation Marks				-.59
Spelling	-.51		-.41	-.70

*$p < .01$ or less

**Standardized mathematics scores were not available for students in either fourth grade class.

The third characteristic significantly related to the error analysis was the students' engagement in specific types of writing at home. Student reports about whether or not they wrote at home and about the types of writing they did at home yielded mixed results. Whether or not they wrote at home was not related to any of the twenty codes in the error analysis. But, the forms of writing practiced at home were related to some of these codes. Students who reported writing poems, letters, and diaries at home made significantly fewer errors in organizing idea, verb form, word choice, terminal punctuation, and also spelling. These results are shown in Table 16. (The contrasts shown in Tables 16 and 17 were tested with one-way Analysis of Variance.) However, these correspondences do not specify causality. Whether writing at home results in fewer errors in these categories or whether success in writing at school motivates students to write at home is, therefore, not clear.

Table 16

Significant Contrasts Between Error Analysis and Type of Writing at Home*

	Error Rates						
	Do you write poems?		Do you write letters?		Do you write a diary?		
Error Category	Yes	No	Yes	No	Yes	No	Unit
Organizing idea	.34	.42	.37	.46	.28	.43	Errors per paragraph
Verb form	---	---	.08	.11	.06	.10	Errors per sentence
Word choice	.17	.22	---	---	---	---	Errors per sentence
Terminal punctuation	---	---	.06	.13	.05	.09	Errors per sentence
Spelling	.05	.08	.06	.09	.04	.08	Errors per word

* All contrasts are significant at $p < .01$

An analysis of our data also reveals no significant relationship between the SES scales and writing at home. And, with only one exception, no relationship exists between SES and the forms of writing students did at home. As shown in Table 17, both high and low SES students reported in equal proportion that they wrote stories, poems, diaries, and other kinds of prose or poetry at home. Only one form of writing--the letter--was related to socioeconomic status. High SES students wrote more letters at home than did low SES students.

Although only a slight difference exists between gender and writing outcome, these data reveal that boys and girls did differ considerably in their indications of what they wrote at home. Table 17 shows that girls were more apt than boys to write anything at home and were also more apt than boys to write poems, letters, and diaries at home. These differences were fairly consistent across all grade levels.

Some of the teachers believed that girls are better at writing about personal relationships, whereas boys are better at writing about current events and impersonal topics. This hypothesis was not tested in the project, but the differences in home writing do indicate that girls practice personal and autobiographical writing more than boys do. Whether this difference affects the quality of the writing on different topics, however, remains to be examined.

Table 17

Students' Self-Report of Writing at Home

ITEM	TOTAL SAMPLE	HIGH SES	LOW SES	MALES	FEMALES
"I write at home."	85%	88%	83%	**78%	91%
"I write stories at home."	85%	38%	41%	33%	45%
"I write poems at home."	32%	33%	32%	**15%	44%
"I write letters at home."	73%	*80%	66%	**59%	83%
"I write diaries at home."	20%	21%	19%	**5%	31%
"I write other things at home."	13%	10%	16%	15%	12%

*contrast is significant at $p < .05$

**contrast is significant at $p < .01$

One other aspect of these correlation studies remains to be addressed. We noted earlier that the teachers had anticipated most of the relationships that the data revealed, and this fact is noteworthy. The literature on expectation effects suggests that a teacher's reactions to student characteristics may be as important or nearly as important as the characteristics themselves in affecting instruction. (See, for example, Brophy and Good, 1974; Finn, 1972.) The eight teachers in this study did not expect that SES or gender or grade level were powerful determinants of the students' ability to write. They did expect that reading and math scores would correlate with writing performance and they were interested at the outset of our study in possible effects of the home environment. These very expectations may have reduced the impact of the characteristics we have noted.

Student Comments About Writing

One other way of measuring the changes that writing instruction produces in students is to examine their statements about writing. Student comments, particularly attitudes, have been used in many studies as a measure of teaching effectiveness. The data from this study raise two sorts of doubts about the usefulness of such measures. First, there may not be any connection between a student's attitudes and that student's ability in writing; in this study, there were no significant correlations between changes in the writing profile scores (Fall to Spring) and changes in either of two affective scales: Self-Concept as a Writer and Attitude Toward Writing (September to May). Students who made fewer errors as the year progressed did not feel better, nor did students who made more errors feel worse about writing or about themselves as writers.

Moreover, student attitudes may reflect the wrong aspects of writing. For example, the May scores for Self-Concept as a Writer were significantly correlated with only one profile category: spelling ($r = -.19$, $p < .005$), which is not a function of composing. Thus, students who felt they were good writers were in fact good spellers. No other aspects of the writing process were correlated to the students' conception of themselves as writers.

These two interview scales, Self-Concept as a Writer and Attitude toward Writing, as well as a third scale, Concept of Writing, were also compared with both gender and socioeconomic status of the students. There were no significant correlations between students' socioeconomic status on any of the three scales; nor were there significant differences between boys' scores and girls' scores on any of the three scales.

The third scale derived from student comments (Concept of Writing), however, did show some promise as a measure of teaching effectiveness, when the students' comments were directly examined. It is a measure of a desirable outcome of instruction, and it did detect significant upward changes in seven of the eight classes during the year (mechanical breakdown of a tape recorder made unusable the September interviews in the eighth class). Results of the Concept scale are shown in Table 18. These results indicate that the students in each class developed a more complex concept of writing during the year. Concrete examples of these changes are indicated by responses to one of the items on the concept scale, "What is the hardest thing about writing?" Here are the responses of five students, each answering in September and again in May.

> "Not looking at the letter chart when I'm writing a word" (September)
>
> "Capitals and periods" (May)
>
> --grade three
>
> "When I make holes in the paper" (September)
>
> "Thinking of the right word" (May)
>
> --grade four
>
> "Spelling some of the words" (September)
>
> "Putting ideas in the right order" (May)
>
> --grade five
>
> "Making the I's" (September)
>
> "If I have an idea and don't know how to put it down" (May)
>
> --grade five
>
> "Punctuation and spelling" (September)
>
> "Getting more ideas after you get the first idea" (May
>
> --grade six

Table 18

Concept of Writing

Classroom	Sept.	May	t	p<	n
31	2.6	4.5	2.5	.05	10
32	-	-	-	-	-
41	4.0	10.0	4.1	.005	9
42	1.1	7.8	10.6	.001	11
51	4.8	9.3	4.3	.001	13
52	5.0	9.2	4.2	.001	11
61	3.0	8.1	6.7	.001	17
62	6.6	9.5	3.0	.01	12

In short, the measures of student affect used in this study did not show much promise as indicators of the effectiveness of writing instruction. The cognitive measure of one's concept of writing, however, does seem to be a useful measure of effectiveness if it can be employed with other measures. By itself it is limited; students' responses to the questions do not give a teacher guidance about how to be effective, and a measure of effectiveness should do more than simply evaluate.

The Dynamics of Design

A pragmatic distinction is needed to put the various sections of this chapter in perspective. The distinction lies within the broad concept of "design" which can entail planning of different sorts. The difference lies in the scope and pace of the planning. One concept of design entails planning in a more static sense: the invention and forming of parts into a structure of some sort, such as a support system for writing instruction. In a more limited, tactical sense, the planning inherent in the concept of design becomes a series of separate decisions. In this sense the teacher designs writing instruction even while conducting it. The design consists of anticipating the interaction that will follow what is now happening and choosing from an array of options what to do next; the planning in this case often occurs within seconds.

The distinction between prior planning and tactical planning is important to bear in mind, given the model of writing instruction that we described in Chapter Four. As evident in that model's countless variable combinations of instructional activities and their characteristics, the teacher's tactical planning typically preempts prior planning. A certain logic of design becomes evident thereby, albeit paradoxical. If any prior planning is to engender effective writing instruction, it would appear that such planning must accommodate the teacher's tactical situation--and not the other way around. This notion radically contradicts the institutional planning for writing instruction in the setting that we observed (as described in Chapter Three), which presumably explains why such planning was felt to be ineffective and therefore was disregarded by the teachers.

Our findings are all compatible with the premise that a support system, to be effective, must be derived from whatever it is supposed to support, which in this case is the teacher's tactical situation. In that situation the teacher's responsive decisions are largely contingent on the present need of each individual student who is engaged in some aspect of the writing task; and at any given time those aspects of the task, and hence those individual needs, are different and various. Plans that focus on those differing individual needs are likely to engender more effective instruction than any plans that disregard them.

The needs and abilities of students as individuals rather than as students in groups would therefore appear to provide a useful focus for research in behalf of planning. Accordingly, any research that addresses the basic instructional activities will presumably have the most immediate effect on writing instruction, especially if it assesses the activities rather than the teachers. Accordingly, any research in scope and sequence will significantly help long-range planning, expecially if it addresses growth indicators in the individual. Longitudinal studies using error analyses of texts seem likely to discover growth indicators. Accordingly, any research that can link a scope and sequence to the teacher's tactical situation can help a teacher to formulate the needs of individual students into clusters of lessons or groups of instructional units.

All of these tasks appear to be within the realm of collaborative research. The segments of a scope and sequence would have to be tested in the classroom. And the other two tasks--assessing activities and developing lesson clusters--could be accomplished by naturalistic observation and progressive coding. Naturalistic observation identifies categories of behavior which progressive coding systematically defines. For example, lesson clusters based on the needs and abilities of individual students could be derived by observing and clarifying certain kinds of repeated behavior in the apparent continuum of writing instruction. Repeated questions by students and the repetitions of reviewing by the teacher might be compared with error patterns in the written texts. Then, the foci of these repetitions could lead to lesson clusters that feature targeted teaching.

Significantly, all of these tasks were mentioned at one time or another in the later plenary meetings of our research team and a final questionnaire which the teachers answered revealed their awareness of the capabilities of collaborative research. Teacher H was impressed with "seeing these same things in my own class or someone else's," and Teacher E put it somewhat differently: "Many of the truisms that we arrived at during plenary meetings confirmed things that I had always sensed to be true about writing instruction." Before our study was concluded, Teacher A had already begun to prepare a handbook of writing instruction with a group of teachers, administrators, and parents. Teacher G was anticipating a reference system based on "better record keeping and storage of writing samples." Teacher B enrolled in a doctoral program to study instruction in reading and writing. And Teacher C was planning to review our study with the superintendent. "Hopefully," she said, "I can convince him that curriculum changes are needed."

References

Barritt, Loren S. and Kroll, Barry M. Some implications of cognitive-development psychology for research in composing. In C. R. Cooper and L. Odell (Eds.), Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

Becker, Howard S. Problems of inference and proof in participant observation. American Sociological Review, 1958, 23, 652-660.

Bellack, Arno A. and Davitz, Joel R. The Language of the Classroom: Meanings Communicated in High School Teaching. New York: Institute of Psychological Research, Teachers College--Columbia University, 1963.

Berliner, David C. Successful classroom teaching and learning. Paper presented at the meeting of the Educational Forum (Washington, D.C., November 6-7, 1978.)

Bossert, Steven T. Tasks and Social Relationships in Classrooms. Cambridge: Cambridge University Press, 1979.

Braddock, Richard, Lloyd-Jones, Richard and Schoer, Lowell. Research in Written Composition. Urbana, Ill.: National Council of Teachers of English, 1963.

Britton, James. The composing processes and the functions of writing. In C. R. Cooper and L. Odell (Eds.), Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

Britton, J.; Burgess, T.; Martin, N.; McLeod, A.; and Rosen, H. The Development of Writing Abilities (11-18). London: MacMillian Education, Ltd., 1975.

Brophy, Jere and Good, Thomas L. Teacher-Student Relationships: Causes and Consequences. New York: Holt, Rinehart and Winston, 1974.

Brown, Clark. The devil's syllabus. College Composition and Communication, 1975, 26, 365-67.

Chew, Charles R. and Schlawin. Inservice: exhortation or participation? Language Arts, 1978, 55(5), 602-606.

Clark, Christopher M. and Yinger, Robert J. The Hidden World of Teaching: Implications for Research on Teacher Planning. East Lansing, Michigan: The Institute for Research on Teaching, Michigan State University, 1980.

References (Continued)

Cooper, Charles R. and Odell, Lee (Eds.). Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

Cooper, Charles R. and Odell, Lee (Eds.). Evaluating Writing: Describing, Measuring, Judging. Urbana, Ill.: National Council of Teachers of English, 1977.

Crowley, Sharon. Components of the composing process. College Composition and Communication, 1977, 29(2), 166-69.

de Beaugrande, Robert. Linguistic theory and composition. College Composition and Communication, 1978, 29, 134-40.

Dunkin, M. J. and Biddle, B. J. The Study of Teaching. New York: Holt, Rinehart and Winston, 1974.

Elbow, Peter. Writing Without Teachers. New York: Oxford University Press, 1973.

Emig, Janet. Hand, eye, brain: Some basics in the writing process. In C. R. Cooper and L. Odell (Eds.) Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

Emig, Janet. The process of writing. NIE Writing Conference Abstracts, 1977 (June), 241-2.

Emig, Janet. The Composing Processes of Twelfth Graders. Urbana, Ill.: National Council of Teachers of English, 1971.

Finn, Jeremy. Expectations and the educational environment. Review of Educational Research, 1972, 42(3), 387-410.

Flanders, N. A. Analyzing Teacher Behavior. Reading, Mass.: Addison-Wesley, 1970.

Flower, Linda S. and Hayes, John R. A Process Model of Composition. NIE Technical Report No. 1, August, 1979.

Fox, Patricia. Why Johnny Can't and the Cat in the Hat. English Journal, 1976, 65(8), 38-9.

Gage, N. L. Research Design and the Teaching of English. Champaign, Ill.: National Council of Teachers of English, 1964.

Giroux, Henry A. Beyond the writing crisis. Journal of Education, 1978, 160(4), 40-9.

Glaser, B. and Strauss A. The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine, 1967.

References (Continued)

Graves, Donald H. Balance the Basics: Let Them Write. New York: Ford Foundation, 1978.

Graves, Donald H. Research update: we won't let them write. Language Arts, 1978, 55, 635-640.

Graves, Donald H. Research update: language arts textbooks: a writing process evaluation. Language Arts, 1977, 54, 817-23.

Graves, Donald H. An examination of the writing processes of seven year old children. Research in the Teaching of English, 1975, 9, 227-241.

Greene, Maxine. Toward wide-awakeness: an argument for the art and humanities in education. Teacher's College Record, 1977, 79(1), 119-24.

Griffin, Margaret. Untitled abstract in NIE Writing Conference Abstracts, 1977 (June), 89-95.

Halliday, M. A. K. and Hasan, Ruqaiya. Cohesion in English. London: Longman Group Ltd., 1976.

Hipple, Ted. Writing in the middle/junior high school. English Journal, 1975, 64, 82-3.

Hunt, Kellogg W. Recent measures in syntactic development. In R. Larson, Children and Writing in the Elementary School. London, Oxford University Press, 1975.

Hunt, Kellogg W. Grammatical Structures Written at Three Grade Levels: NCTE Research Report No. 3. Urbana, Ill.: NCTE Committee on Research, 1965.

Kantor, Ken and Perron, Jack. Thinking and writing: creativity in the modes of discourse. Language Arts, 1977, 54(7), 742-749.

King, M. L. Research in composition: a need for theory. Research in the Teaching of English, 1978, 12(3), 193-202.

Kinneavy, J. A Theory of Discourse. Englewood Cliffs, N.J.: Prentice-Hall, 1971.

Kroll, Barry M. and Schafer, John C. Error-analysis and the teaching of composition. College Composition and Communication, 1978, 29, 242-8.

Larson, Richard. Evaluating instruction in composition: An art not yet born. Paper presented at the College Composition and Communication Conference, (Minneapolis, April, 1979).

References (Continued)

Loban, W. Language Development: Kindergarten Through Grade Twelve. Urvana, Ill.: National Council of Teachers of English, 1976.

Lucking, Robert A. Developing question-conscious language arts teachers. Language Arts, 1978, 55, 578-582.

Master, Doris. Inservice education--not a spectator sport. Language Arts, 1978, 55(5), 597-601.

Meckel, Henry C. Research on teaching composition. In N. L. Gage (Ed.), Handbook of Research on Teaching, AERA. Chicago: Rand, McNally and Co., 1963, 966-1006.

Medley, Donald. Teacher Competence and Teacher Effectiveness: A Review of Process-Product Research. Washington, D.C.: American Association of Colleges for Teacher Education, 1977.

Mellon, John C. A taxanomy of composition competencies. A paper presented to the Minnesota Perspectives on Literacy Conference, sponsored by the College of Education, University of Minnesota (Minneapolis, June 1977).

Mergendoller, J. R., Ward, B. A. and Tikunoff, W. J. Two collaborative strategies for research on teaching. Paper presented at Alternative Research Models Conference (St. Louis, April, 1979).

Moffett, James. Teaching the Universe of Discourse. Boston: Houghton Mifflin, 1968.

Murray, Donald M. Internal revision: a process of discovery. In C. R. Cooper and L. Odell (Eds.), Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

Nold, Ellen W. What Alice must be taught: implications for research and pedagogy. NIE Writing Conference Abstracts, 1977 (June), 303-13.

Odell, Lee. Measuring changes in intellectual processes as one dimension of growth in writing. In C. R. Cooper and L. Odell, (Eds.), Evaluating Writing: Describing, Measuring, Judging. Urbana, Ill.: National Council of Teachers of English, 1977.

Parke, Margaret. Composition in primary grades. In Children's Writing: Research in Composition and Related Skills. Urbana, Ill.: National Council of Teachers of English, 1961.

Peterson, Penelope L., Marx, R. W. and Clark, C. M. Teacher planning, teacher behavior, and student achievement. American Educational Research Journal, 1978, 15, 417-32.

Peterson, Penelope L. and Clark, Christopher M. Teachers' reports of their cognitive processes during teaching. *American Educational Research Journal*, 1975, *15*(4), 555-565.

Popham, W. J. and Baker, E. L. *Systematic Instruction*. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1970.

Rhode Island Department of Education. *Basic Skills Achievement: A Four Year Perspective*. Providence: Author, 1979.

Rohman, D. G. Pre-writing: the stage of discovery in the writing process. *College Composition and Communication*, 1965, *16*, 106-112.

Rupley, W. H. and Norton, D. E. ERIC/RCS report: preservice and inservice education of language arts teachers. *Language Arts*, 1978, *55*, 641-47.

Shaughnessy, M. P. et al. *Journal of Basic Writing*, Vol. 1, No. 4. New York: Instructional Resource Center, City University of New York, 1978.

Shaughnessy, M. P. *Errors and Expectations: A Guide for the Teacher of Basic Writing*. New York: Oxford University Press, 1977.

Shiels, M. Why Johnny Can't Write. *Newsweek*, December 8, 1975, 58-65.

Smith, Louis M. and Geoffrey, William. *The Complexities of an Urban Classroom: An Analysis Toward a General Theory of Teaching*. New York: Holt, Rinehart and Winston, Inc., 1968.

Sommers, Nancy. Response to Sharon Crowley, "Components of the Composing Process." *College Composition and Communication*, 1978, *29*, 209-211.

Squire, James R., et al. *The National Interest and the Teaching of English*. Champaign, Ill.: National Council of Teachers of English, 1961.

Stewart, Donald C. Composition textbooks and the assault on tradition. *College Composition and Communication*, 1978, 1978, *29*, 171-175.

Stewart, Robert W. Research seeks the source of good writing. *The Providence Journal*, February 24, 1980, B1-2.

Tunnel, G. B. Three definitions of naturalism: An expanded definition of field research. *Psychological Bulletin*, 1977, *84*(3), 426-437.

Tyler, R. W. *Basic Principles of Curriculum and Instruction*. Chicago: University of Chicago Press, 1950.

References (Continued)

Van Nostrand, A. D. The inference construct: a model of the writing process. ADE Bulletin, May, 1978, 8-20.

Walmsley, Sean A. What elementary teachers know about writing. Language Arts, 1980, 57, 732-734.

Whale, K. and Robinson, S. Modes of students' writings: a descriptive study. Research in the Teaching of English, 1978, 4, 349-355.

Wildfong, Susan and Roehler, Laura. Teacher's Decisions about Writing Instruction in the Elementary School. East Lansing, Michigan: Institute for Research on Teaching, College of Education, Michigan State University, 1979. NIE contract No. 400-76-0073.

Yinger, Robert J. A study of teacher planning. Elementary School Journal, 1980, 80(3), 107-127.

Young, Richard. Paradigms and problems: needed research in rhetorical invention. In C. R. Cooper and L. Odell (Eds.), Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

Zahorik, J. A. Teacher's planning models. Educational Leadership, 1975, 33, 134-39.

APPENDIX A

Schedule of Meetings
and Classroom Observations

Note: The schedule of trinary meetings also reflects the schedule of the observations. Before the trinary meeting, the two teachers involved in each trinary visited each others' classes, and the NP observer visited both teachers' classes.

SCHEDULE OF MEETINGS

Cycle	Dates	Plenary Meeting no.	NP Meeting no.	Trinary Meeting no.	Trinary Participants
Orientation	9/1-9/15	1,2			
1	9/16-9/30			1	31,32,NP1
				2	51,52,NP3
				3	41,42,NP2
				4	61,62,NP4
2	10/1-10/27	3,4	1	5	51,52,NP2
				6	61,62,NP3
				7	31,32,NP4
				8	41,42,NP1
3	10/29-11/9			9	32,42,NP3
				10	31,41,NP2
				11	51,61,NP4
				12	52,62,NP5
4	11/12-12/1	5,6	2	13	32,41,NP3
				14	31,42,NP2
				15	51,61,NP1
				16	52,62,NP4
5	12/10-12/21	7	3	17	41,61,NP1
				18	42,62,NP2
				19	31,51,NP3
				20	32,52,NP4
6	1/2-1/20	8	4	21	31,52,NP3
				22	41,61,NP1
				23	42,62,NP2
				24	32,51,NP4
7	1/28-2/17	9	5	25	61,62,NP3
				26	41,42,NP4
				27	31,32,NP1
				28	51,52,NP2
8	2/18-3/30	10,11	6	29	41,42,NP3
				30	31,32,NP5
				31	61,62,NP2
				32	51,52,NP4
9	4/1-5/4	12,13	7	33	32,62,NP2
				34	31,61,NP4
				35	41,51,NP3
				36	42,52,NP1
10	5/5-6/1	14	8	37	41,52,NP3
				38	32,61,NP2
				39	31,61,NP4
				40	42,51,NP5
Summer recess: profile training sessions					
Final Report Period	9/1-10/26	15,16	9		

APPENDIX B

Writing Assignments in Eight Classrooms, Grades Three through Six, during 1979/80

Notes:

1. Each assignment is numbered by sequence within a classroom (#31-05 designates the fifth assignment in Classroom 31).
2. Each assignment is coded according to one of four emphases: writer-oriented (W), subject-oriented (S), reader-oriented (R), or text-oriented (T).
3. An asterisk (*) preceding any code indicates that texts were selected from this set for further analytic description.

Classroom 31

Phase I: 9/79 - 11/79

31-05 Given a movie about tigers,
--write about it (S)

31-06 Given the story, "The Sorcerer's Apprentice,"
--write about it (*S)

31-07 Given the story of Wicked Witch Willebrand and a picture of the witch painted after hearing the story,
--write a story about the picture (S)

Phase II: 12/79 - 2/80

31-09 Given an in-class reading of "The Giving Tree" and a discussion of giving and taking,
--write what Christmas means to you (W)

31-10 Given a reading of "How the Grinch Stole Christmas,"
--write about the story (S)

31-11 Given a movie on what kids want to be when they grow up,
--write about what you want to be (W)

31-12 Given a play performed in class,
--write about it (S)

31-14 Given a discussion in which students pretended they were lost mittens and a list of four questions,
1) What are you?
2) How did you get lost?
3) Who found you?
4) What did he/she do with you?
--write a story about being a mitten (W)

Phase III: 3/80 - 5/80

31-15 Given the subject, rain,
--describe how it makes you feel or pretend you are rain (W)

31-16 Given the subject, made-up animals,
--write a story about them (S)

31-17 Given the subject, kites,
--write a story imagining you are a kite (W)

31-18 Given an ordinary object of your choosing,
--write a story in which it takes on magical properties (*T)

31-19 Given your favorite color,
--write a story about why this color is your favorite (W)

31-21 Given a subject, the big wind of the eighties, and four questions as an outline,
--write a story (S)

31-22 Given the subject, your favorite person,
--write a story about your favorite person (S)

Classroom 32

Phase I: 9/79 - 11/79

32-02 Given part of a story, "Kerry's Catch,"
--imagine a) what Kerry will do
b) what the fish will do (S)

32-03 Given the story, "Georgie,"
--write several sentences about the book (S)

32-06 Given a poster showing a squirrel in a tree,
--write a story (S)

32-07 Given a photograph of a produce stand,
--write a story (*S)

32-09 Given a picture of a girl sick in bed with spots on her face,
--respond to the question, "If your class were going to the circus today, how would you feel?" (W)

32-11 Given a picture,
--write a story about it

Phase II: 12/79 - 2/80

32-14 Given a picture of a bear in a cage,
--write a story about the picture (S)

32-21 Given the topic, spending ten pennies,
--describe how you'd spend them (W)

32-23 Given a discussion of Ground Hog Day,
--write a story about seeing your shadow (W)

32-28 Given an activity done in class (making a newspaper tree),
--describe the activity (R)

32-30 Given a story and filmstrip, shown in class,
--put yourself in the person's place and write a story about how you'd react (W)

Phase III: 3/80 - 5/80

32-34 Given a pot of tulips brought into the room,
--write a story about them (S)

32-37 Given the idea, imagine how it feels to live in a pickle jar,
--write a story (W)

32-39 Given a picture,
--describe it (S)

32-41 Given the making of waffles in class yesterday,
--write an experience story (W)

32-44 Given a general subject, fruit, and using the device of who, what, when, where,
--write an imaginative story (*T)

32-46 Given a coloring-book picture,
--write a story about it (S)

32-50 Given an activity (or movement) of your choosing,
--write a story following that activity (S)

A10

Classroom 41

Phase I: 9/79 - 11/79

41-01 Given a Mud Monster on the loose,
--write a story telling how you'll find and capture it (W)

41-02 Given the situation that you are on your way to Ghostville or Monstertown,
--write a story relating your adventures (W)

41-03 Given five spelling words,
--write a paragraph incorporating those words (T)

41-04 Given an in-class review of the elements of the mystery story,
--write a mystery (T)

41-06 Given a subject of your choosing,
--write a paragraph about it, incorporating descriptive adjectives (T)

41-08 a) Given a headline which you have developed,
--write a story about what happened (*T)
or
b) Given something important that you have studied or done recently,
--write a headline about your choice and develop a news story about it (*T)

Phase II: 12-79 - 2/80

41-09 Given the production of a Christmas play in class,
--write about this experience (W)

41-10 Given group discussions of schools of the future,
--write about what a school of the future will be like (S)

41-12 Given discussion of Middle East problems,
--write about these problems and offer suggestions for their remediation (R)

41-14 Given your knowledge of westward movement in the U.S. in the early 1800's,
--write a seven-day diary describing a trip west (T)

41-15 Given a topic of your choice,
--write on it (S)

Phase III: 3/80 - 5/80

41-17 Given the topic, "Viking Piglet," and using the words from a given crossword puzzle,
--write a story (T)

41-18 Given a current problem of your choice and some spelling words,
--write an editorial on that problem in a single paragraph incorporating the spelling words (*T)

41-19 Given discussion of topic sentences,
--write a single paragraph (T)

41-20 Given the situation, Snoopy takes you on an adventure,
--write a story (S)

41-23 Given one of two subjects:
1) How do you feel hanging in air? What do others say? How will you get down?
or
2) You have been elected U.S. President. Who will you choose for V.P.? What laws will you pass? How will you deal with poverty, pollution and crime?
--expound on the chosen subject (T)

41-24 Given a topic of your choice,
--write a report on it (T)

Classroom 42

Phase I: 9/79 - 11/79

42-02 Given the story of Mrs. Frisby,
--summarize it (S)

42-05 same as above (S)

42-06 Given the subject, Thanksgiving,
--write about how we celebrate it (S)

42-07 Given the subject, the first Thanksgiving,
--write about similarities and differences between then and now (*S)

Phase II: 12/79 - 2/80

42-08 Given a situation (choose one of four from commercial handout),
--write what you'd do in that situation

42-09 Given the topic, if I were a Christmas present,
--write about what happens to you (W)

42-10 Given a subject,
--write a description of it (S)

42-11 Given a commercial ditto about computers,
--write about what you could do with a computer ([illegible])

42-12 Given a commercial ditto discussing moods that people feel,
--choose a mood and write about it (S)

Phase III: 3/80 - 5/80

42-13 Given oral work on instruction-giving,
--write instructions on how to do something (R)

42-14 Given a discussion of the components of a tall tale (and some examples),
--write a tall tale (T)

42-15 Given a picture viewed in class,
--write a paragraph describing it (S)

42-16 Given a discussion of the elements of a news story (and the 5 W's method),
--write a news story (*T)

42-17 Given a discussion of feeling right when everyone thinks you wrong and a situation in a hypothetical baseball game,
--write a story about that game (S)

42-18 Given the situation that you are a machine,
--write about it (W)

Classroom 51

Phase I: 9/79 - 11/79

51-03 Given a book of your choosing,
--write a book report (T)

51-06 Given an imaginary or real incident of your choosing,
--write a news story about it (*T)

51-07 Given the subject, earth invaders,
--write a story (T)

51-09 Given a book of your choosing,
--write a book report (T)

Phase II: 12/79 - 2/80

51-15 Given an in-class Hanukkah party (and the ensuing latka making),
--write one paragraph about why Hanukkah is celebrated and another about latka making (S)

51-16 Given the situation that you are the last Christmas tree in the lot on Christmas Eve,
--write about how you'd feel (W)

51-18 Given the subject, cat and mouse,
--write a story that sets up a problem and solves it (S)

Phase III: 3/80 - 5/80

51-19 Given a book of your choosing,
--write a book report (T)

51-20 Given readings and movies about Paul Revere,
--explain why Paul Revere made his ride (S)

51-21 Given a classroom/school object,
--write a story about how it is abused and resolve the situation (S)

51-22 Given your favorite object in school,
--explain your choice (W)

51-23 Given to imagine that you inhabit another planet,
--describe yourself in terms of the influence of the gravity and temperature of that planet (W)

51-27 Given your knowledge of the Greek gods,
--write a myth using those gods (*T)

51-29 Given the parents who assisted on the class trip,
--write a thank-you note (T)

51-30 Given the two class trips taken in May,
--write about the trips (S)

Classroom 52

Phase I: 9/79 - 11/79

52-01 Given the subject, the first day of school,
--report on it pretending you are a television newscaster (W)

52-02 Given the topic, a very unusual pet,
--write about an unusual pet (S)

52-04 Given a pressing national issue of your choosing,
--imagine you are the President and write a speech (*T)

52-06 Given an imaginary place of your invention,
--write about your visit to that place (S)

52-07 Given the subject, haunted house,
--write a story (S)

52-11 Given a topic of your choice,
--write a paragraph on it and include twelve spelling words (T)

52-12 Given the topic, ideas for new schools,
--write about your idea (S)

Phase II: 12/79 - 2/80

52-18 Given a book you've read,
--write a book report answering three questions:
1) Tell about one character.
2) Tell what you liked best about the book.
3) Tell what you liked least about the book. (T)

52-19 Given your knowledge of the Iranian Crisis,
--write a letter to the hostages (T)

Phase III: 3/80 - 5/80

52-20 Given the imaginary situation of being a Christmas present,
--write about what you would be and what would happen (W)

52-21 Given the topic, lost spaceship, and a ditto on the topic,
--use your imagination and write a story (T)

52-23 Given a book you've read,
--write a book report emphasizing summary (T)

52-25 Given problems and inventions,
--describe a problem and an invention for solving it (S)

52-28 Given the subject, bunnies,
--write a bunny tale (T)

52-29 Given the subject, an ant's point of view,
--describe it (S)

52-30 Given the recently purchased classroom library,
--write a letter thanking the PTA for purchasing it (R)

52-32 Given an activity or event that might be misunderstood by a Martian,
--write a letter to a fellow Martian describing the activity or event (R)

52-33 Given the Iranian situation,
--express an opinion in a letter to the President of the U.S. (*R)

Classroom 61

Phase I: 9/79 - 11/79

61-02 Given the subject, the environment,
--discuss how we can preserve our environment (S)

61-04 Given the subject, cultures,
--write an essay (T)

61-05 Given the topic, an unusual day,
--write a story (T)

61-07 Given your choice of four topics:
1) what makes me happy
2) what makes me sad
3) what makes me angry
4) my future plans,
--write about this topic (W)

61-11 Given a discussion of the purposes of a book review,
--write a review of a book of your choice (T)

61-13 Given our culture as a subject,
--convince someone that it is a civilized culture (*R)

Phase II: 12/79 - 2/80

61-22 Given an old key,
--write about it using descriptive words, sensory words and metaphors (T)

61-33 Given a discussion of Westerns and of the elements of plot, climax, and conclusion,
--write a Western (T)

61-30 Given the format of a diary or journal,
--write five days of imaginary entries (T)

61-34 Given a discussion of selections from Rites of Passage,
--write a paragraph, real or imaginary, about learning a lesson or growing up a little (S)

61-37 Given a lesson on the form of a business letter,
--write to a company or organization requesting information (T)

Phase III: 3/80 - 5/80

61-38 Given three issues you feel to be important,
--write a campaign speech pretending you are a candidate (T)

61-40 Given discussion of characteristics, examples, and
suggested topics of tall tales,
--write a tall tale (T)

61-41 Given discussion of the elements of a fable,
--write a fable (T)

61-42 Given the subject, snowless winters,
--discuss problems caused and offer creative solutions (S)

61-48 Given the subject, common gadgets and appliances,
--write about other needed inventions (S)

61-50 Given the subject, school buses,
--explain your views on whether or not they should be
banned from cities (*R)

61-53 Given some suggested topics,
--persuade someone to do something (R)

Classroom 62

Phase I: 9/79 - 11/79

62-01 Given a photo of an apple with two bites missing,
--write a story about the picture (S)

62-12 Given the subject, atoms and molecules,
--describe their relationship (S)

62-15 Given three pictures of your choice in the Providence
Journal,
--create a short story based on them (*T)

62-18 Given the theme, the chemist is a detective,
--write a paragraph (W)

62-19 Given the topic, if I were the chief of police,
--write a paragraph

62-23 Given a book of your choice,
--write a book report

Phase II: 12/79 - 2/80

62-22 Given class work on Geology,
--write a few paragraphs telling how scientists identify minerals (S)

62-26 Given a lesson on Geology,
--write a few paragraphs on how rocks are formed (S)

62-27 Given a study of the format of a press release,
--write a press release about the cantata produced in class (T)

62-28 Given class study of Frost's poem, "Stopping by Woods..."
--write, in two or three paragraphs, what you believe to be the poet's surface/symbolic meaning or write one paragraph interpreting the poem as narrative (S)

62-37 Given a book of your choice and the format:
1) title, author, setting; 2) introduction of characters; 3) - 5) incidents; 6) author's style; 7) opinion,
--write a book report (T)

Phase III: 3/80 - 5/80

62-39 Given yourself and your classroom role,
--write a personal essay using metaphors to describe the above (T)

62-41 Given a lengthy class discussion of Rosie Ruiz (the Boston Marathon affair),
--give your personal reflections on the incident (S)

62-42 Given the library as a subject,
--discuss why it is important in your life (W)

62-43 Given work on signal words in paragraph development and the topic, Thursday morning at school,
--write a paragraph (T)

62-44 Given a discussion of paragraph unity and either of two topics, the last person on earth, or a frightening ride,
--write a paragraph (T)

62-45 Given a process of your choice,
--describe "how to" (*R)

62-46 Given a list of adverbs and adjectives,
--write a paragraph using them to create an impression (T)

APPENDIX C

Student Interview Forms

CRW/NIE
September Student Questionnaire

Student code no. _______

11. What is your favorite subject? English=1, Math=2, Science=3, Art=4, Social Studies=5, No Answer=9
12. What is your least favorite subject? 1 2 3 4 5 9 (code as 1)
13. Do you like to read? No=0 Yes=1 Sort of=2 No answer=9
14. Do you like to write? No=0 Yes=1 Sort of=2 No answer=9
15. How often do you write in school? Hardly ever (less than once a month)=1 1 per week=2 several per week=3 1 a day=4 several per day=5 no answer=9

WHAT KINDS OF THINGS DO YOU WRITE IN SCHOOL?
16. stories? No=0 Yes=1
17. poems? No=0 Yes=1
18. letters? No=0 Yes=1
19. math, and other "non-writing"? No=0 Yes=1
20. drawings? No=0 Yes=1
21. "other writing"? No=0 Yes=1
22. reports? No=0 Yes=1
23. assignments, exercises (dittoes, spelling tests, etc., not composed by student)? No=0 Yes=1
24. Do you write at home? No=0 Yes=1 No answer=9

WHAT SORT OF THINGS DO YOU WRITE AT HOME?
25. stories? No=0 Yes=1
26. poems? No=0 Yes=1
27. letters? No=0 Yes=1
28. math, and other "non-writing"? No=0 Yes=1
29. drawings? No=0 Yes=1
30. diary? No=0 Yes=1
31. "other writing"? No=0 Yes=1

32. Are you a good writer? No=0 Yes=1 Sort of=2 No answer=9
33. Why do you think so? Teacher says so=1 Parent says so=2 I think so=3 Friends say so=4 No answer=9

34. What is the hardest thing about writing? penmanship=1 word choice=2 spelling=3 syntax/punctuation/capitalization=4 thinking up idea=5 putting ideas into words=6 other=7 no answer=9
35. What is the easiest thing about writing? (code as 34)
36. How do you know if something you've written is well written or poorly written? other people say so=1 teacher's grade=2 physical appearance of paper=3 no mistakes (spelling, word choice, etc.)=4 can't tell=8 no answer=9
37. How do you know other writing is good or bad? interesting/I like it=1 no mistakes=2 other people say so=3 can't tell=8 no answer=9
38. What mistake do you make most often when you write? (code as 34)
39. Would you rather write or read? Write=1 Read=2
40. Would you rather write or do math? Write=1 Do math=2

60(-61) Interviewer code
(01=Pedro, 02=Amy, 03=Michele, 04=Bob

CRW-NIE STUDY OF WRITING INSTRUCTION
END-OF-YEAR STUDENT INTERVIEWS

col.

1-4 student code number

5 male (1) female (2)

11 favorite subject: Eng (1), math (2), Sci (3), Art (4), Social Stud (5), other (6), NA (9)

12 least favorite subject: (1) (2) (3) (4) (5) (6) (9)

13 Do you like to read? no (0), yes (1), sort of (2), NA (9)

14 Do you like to write? no (0), yes (1), sort of (2), NA (9)

15 How often do you write in school? hardly ever (less than once a week) (1), once a week (2), several per week (3), once a day (4) several per day (5), NA (9)

WHAT KINDS OF THINGS DO YOU WRITE IN SCHOOL? (let student volunteer types)

16 stories no (0), yes (1)
17 poems no (0), yes (1)
18 letters no (0), yes (1)
19 reports no (0), yes (1)
20 other "writing" no (0), yes (1): ____________________
21 "non-writing" (math, drawing, spelling, etc.) no (0), yes (1)

22 Do you ever write things at home?

WHAT KINDS OF THINGS DO YOU WRITE AT HOME? (let student volunteer types, then ask each type specifically (except "non-writing"))

23 stories no (0) yes (1)
24 poems no (0) yes (1)
25 letters no (0) yes (1)
26 diary no (0) yes (1)
27 other "writing" no (0) yes (1): ____________________
28 "non-writing" no (0) yes (1)

29 Do your parents help you when you write at home? no (0), yes (1)

30 Are you a good writer? no (0), yes (1), sort of (2), NA (9)

31 Why do you think so?: ____________________
(teacher says so (1), parents say so (2), friends say so (3), I just think so (4), good ideas (5), mechanics (6), appearance (7), NA (9))

5/80

32 What is the best thing you have written this year in school? ____________________

____

33 Why is that the best? ____

34 Do you think you are a better writer now than you were a year ago?
no (0), yes (1), sort of (2), NA (9)

35 What kinds of things do you do better than you did at the beginning of the year?

____

36 What is the hardest thing about writing? ______________________________________

____

penmanship (1), word choice (2), spelling (3), syntax/punct./capitals (4), ideas (5)
putting ideas into words (6), other (7) NA (9)

37 What is the easiest thing about writing? ______________________________________

____

(1) (2) (3) (4) (5) (6) (7) (8) (9)

38 How do you know if something you have written is well-written or poorly written?

____

____________________ People say so (1), teacher's grade (2), appearance (3)
no mistakes (spelling, etc.) (4), can't tell (8), NA (9)

39 What kinds of mistakes do you make when you write?

____

(1) (2) (3) (4) (5) (6) (7) (8) (9)

40 If you had a choice, would you rather do writing or reading? write (1) read (2) NA 9

41 Would you rather do writing or math? write (1), math (2) NA (9)

42 How many brothers and sisters do you have?

43 How many are older than you?

44 Who do you live with: your mother, your father, or both?
M & F (1), M only (2), F only (3), neither (4): ______________________________

45-46 What kind of work does your father (or man of the house) do?:

____

47-48 What kind of work does your mother (or woman of the house) do?:

____

61 Interviewer code Pedro (1), Amy (2), Michele (3), Bob (4),

80 Card number

APPENDIX D

Student Background
Information Form

teacher ________________ A27

grade _____

CRW WRITING STUDY
BACKGROUND INFORMATION

*1. Student ID code or name ____

2. Age: _____ 3. Sex: M F

4. Ethnicity/nationality:

___ Black
___ Chinese
___ English
___ French
___ Irish
___ Italian
___ Jewish
___ Portuguese
___ Spanish
___ Other: ______________________________

5. Primary language spoken at home: ______________________________

6. Does the child receive:

___ reduced-fee lunch
___ no-fee lunch
___ reduced-fee breakfast
___ no-fee breakfast

7. Father's occupation:

Mother's occupation:

8. Number of children in the student's family (including the student):

Birth order of the student:

9. Most recent standardized test scores. Name of test: ______________________
(Report standard scores (T-scores, Z-scores, stanine, SAT score) if available. Otherwise, report percentiles, grade equivalent, etc.)

10. End-of-year grades from previous class.

11. Number of absences last year: _____

*NB: If you use an ID code, be sure to use the same code on all writing samples we collect from the student.

APPENDIX E

Synthetic Curriculum for Writing Instruction, Grades Three through Six

HANDWRITING/SPELLING

Grade 3		Grade 4		Grade 5		Grade 6	
entrance	goal	entrance	goal	entrance	goal	entrance	goal
printed letters	cursive writing	system utilized school district					
initial capitalization	whole range of capitalization	beginning of: cursive writing; sentence capitalization	cursive expand capitalization	whole range of capitalization			
I							
some contractions		contractions					
	apostrophe						
	hyphenated words						
		exposure to commas					
		knowledge of phonetic rules					

WORDS

Grade 3		Grade 4		Grade 5		Grade 6	
entrance	goal	entrance	goal	entrance	goal	entrance	goal
	synonyms, antonyms	dictionary skills	expand				
	larger vocabulary	singular & plural					
		some compounds					
			possessive				
			quotation marks	quotation marks, different speakers	quotation marks, different speakers		
		PARTS OF SPEECH					
	label basic parts	noun, pronoun, verb, adjective	preposition, conjunction, adjective, adverb, conjunction	all parts of speech introduced	parts of speech polished		
			comparisons				
					pronoun referents		
					recognize similes & metaphors		
					subject & predicate		

SENTENCES

Grade 3		Grade 4		Grade 5		Grade 6	
entrance	goal	entrance	goal	entrance	goal	entrance	goal
	understand basic sentence and transformation	recognize		complete sentence		recognize fragment	recognize and not write fragment
recognize: telling & asking		kinds of sentences			varieties of sentence styles	recognize and write 4 patterns	recognize and write
noun & verb		subject & predicate			subject-verb agreement	recognize how to arrange, expand and reduce sentences	recognize & write arranging, expanding, reducing sentences
							recognize how to subordinate clauses, be able to write subordinate clauses
end of sentence	recognize run-on	end of sentence	compound sentence	end of sentence			
	comma in series	some commas		some commas	all commas		
					colon, semicolon		
			agreement: tense and case				

PARAGRAPH

Grade 3		Grade 4		Grade 5		Grade 6	
entrance	goal	entrance	goal	entrance	goal	entrance	goal
	recognize paragraph	sequence of sentences				recognize paragraph is more than 1 sentence	recognize & write in a way that reveals mastery
	indent						
	don't start new line with each sentence						
write 1 thought in 4-5 sentences (i.e., rough)			main idea	main idea	topic sentence	topic sentence	topic sentence
					supporting details		
					conclusion	beginning, middle, and end	beginning, middle, and end
						recognize unity and coherence	recognize unity and coherence
						paragraph and title related	paragraph and title related
	select & organize info. for book rpt.						

MULTI-PARAGRAPHS

Grade 3		Grade 4		Grade 5		Grade 6	
entrance	goal	entrance	goal	entrance	goal	entrance	goal
	write 1 or 2 paragraphs: story, letter, book report						
		2 or 3 paragraphs	relationships in 2 or 3 paragraphs		3 paragraphs		know how to link paragraphs and write linked paragraphs
			main idea, sequence, conclusion				recognize conclusion and be able to write one
							recognize opening paragraph and be able to write one
							recognize a line of reasoning and be able to write one

OTHER

Grade 3		Grade 4		Grade 5		Grade 6	
entrance	goal	entrance	goal	entrance	goal	entrance	goal
	looking at things in different ways						
	organizing thoughts						
			proofread				
			edit				
			ms form				
					outline		
						point of view	point of view
							recognize & write fiction & nonfiction
							recognize 5 w's in & write news story
							business letter
							poetic forms
			liking to write				language/audience relationship

APPENDIX F

Constructs of Activities and Characteristics

DEFINITION OF ACTIVITY CONSTRUCTS

1. PRESENTING

Definition:

This activity consists of describing, illustrating, and explaining a skill or concept related to writing. Presenting is characteristically systematic, indicating the teacher's assumption that this specialized information is unfamiliar to most of the students.

Presenting is planned as a self-contained activity. However, the teacher may interrupt whatever activity is occurring and switch to presenting. The teacher makes this switch upon discovering that the students are not sufficiently familiar with a skill or concept on which the writing lesson depends. In this case, the activity is "reteaching" which is coded as presenting.

The change to presenting (or "reteaching") characteristically occurs during the activity of reviewing. One cue to a switch to reteaching, which is coded as presenting, is the students' repeated failure to answer the teacher's questions. The teacher's activity then changes to systematic presentation of what should have been the answers to the questions. Reteaching occurs often and unexpectedly.

Examples:

1. Teacher presents a lesson on compound sentences. Students practice combining two related sentences using a conjunction.

2. While reviewing for a script-writing lesson, the teacher realizes that the students are having difficulty distinguishing the difference between narrative and dialogue, concepts which she has earlier taught. Teacher then gives students practice in identifying both forms of writing and in changing one to the other before writing begins.

3. Students' writing indicates that they cannot punctuate direct quotations even though the skill has been taught. Teacher reteaches the skill before students write their stories.

Definition does not include:

1. Reviewing

2. Orienting

Examples:

1. Teacher reminds students about metaphors and similies and encourages students to use these figures of speech in their stories (reviewing).

2. Teacher reminds students as they write that a new paragraph is necessary every time the speaker changes (reviewing),

3. Teacher reads a "Bunny Tale." Students are invited to discuss ideas that might be included in a "Bunny Tale" (orienting).

2. GIVING INSTRUCTIONS

Definition:

Giving instructions is to tell, in very specific terms, what the teacher expects the student to do in a given writing assignment. "To give instruction" is to state detailed directions about how a task is to be performed; "giving instruction" is task-oriented, not subject- or content-oriented. This activity often includes cautions.

Examples:

1. "Please write your poem on green lined paper."

2. "Be sure to skip a line between paragraphs."

3. "Please recopy this on white, lined paper."

Definition does not include:

1. Orienting
2. Evaluating by teacher
3. Preventing
4. Reviewing
5. Instructions not related to a writing task

Examples:

1. "Today we will be writing about transportation. Can you name some means of transportation?" (orienting).

2. "Can you think of another word to use here?" (evaluating).

3. "This is our new skill for today; please listen carefully" (presenting).

4. "Do you remember what punctuation mark follows a dependent clause?" (evaluating).

5. "When you finish, do the math problems on page forty-three" (instruction not about writing).

3. ORIENTING

Definition:

Teacher uses any one or more of the following--lecture, discussion, audio-visual aids--to establish student familiarity with a topic before assigning a task on that topic. The task need not immediately follow the orienting.

Examples:

1. Teacher asks students on Halloween Day what they think of when they hear the term "haunted house." Students offer a number of responses which the teacher discusses with them. The activity is followed by the teacher announcing that the students will write a haunted house story.

2. Teacher says, "I want you to think about TV shows. I know we all watch TV, and I'm sure we all have favorite programs. Think of your most favorite program. Can you think of one of two that you like best? Well, I want you to think of just one now, maybe one you like best of all." Following this activity, teacher begins to assign and descrbe a writing task based on one TV show.

3. Teacher shows and discusses with the class pictures of New York City and of a small town in Nebraska. After this activity the teacher asks the class to write about the differences they know or imagine between life in the two environments.

Definition does not include:

1. Teacher merely announces the topic for a writing task.

2. Teacher just gives instructions about a writing task.

Examples:

1. Teacher begins class by saying, "All right, class, we are now going to write a paragraph about Halloween." Then teacher discusses technical aspects of the writing such as sentence structure, punctuation, etc. (giving instruction).

2. Teacher says, "Please put away your readers. For our writing in class today, I want you to write a paragraph about how you feel about school. Okay?" (giving instructions).

4. REVIEWING

Definition:

To review is to remind students of something previously presented or something that has previously occurred.

Like presenting, the activity of reviewing emphasizes some skill or concept related to writing. But in reviewing the teacher assumes that most students already have some knowledge of the skill.

Examples:

1. A restatement by the teacher to the whole class of a fact, concept, term, or skill introduced in the previous lesson. Example: "Haiku poems have three lines, seventeen syllables, one theme."

2. A response by the teacher to the questions of one or more students. Example: (student) "Must there always be only seventeen syllables?" (teacher) "No. The number seventeen is only a general guide..."

3. A restatement by the teacher of a fact, concept or skill that is part of a broader lesson objective. Example: "We have learned the form of limericks, blank verse, Japanese haiku, sonnets..." (then the teacher briefly redefines each).

Definition does not include:

1. Presenting new information along with concepts previously taught

2. Evaluating

Examples:

1. An introduction of information previously unknown to the students, although some reference may be made to familiar data. Example: "American haiku poetry does not have all of the elements of Japanese haiku..." (presenting new information).

2. A comment or suggestion made to a student about the form, substance, verbiage, or appropriateness of a written product. Example: "Take another look at your second line. Count the syllables" (evaluating).

5. WRITING

Definition:

For purposes of observation, writing is an activity performed by a student or students. Specifically, writing is a sequence of two or more sentences generated by the student or students; the second sentence in some way continues the first. These sentences may be in prose or in verse.

Some students may not write complete sentences; consequently, fragments are acceptable in this definition if it is apparent that the teacher assigns a sequence of sentences or that the writer is attempting to write a sequence of sentences.

Examples:

1. Working singly or in a group, the student writes two or more sequential sentences.

2. Student dictates two or more sequential sentences for teacher to copy on board.

3. Students write answers to generalized questions which imply an answer of two or more connected sentences.

Definition does not include:

1. Editing

2. Scribing a word or a word group, unless teacher assigned at least two sentences

3. Scribing a single sentence assigned by teacher

4. Copying an earlier draft

5. Scribing sentences dictated by teacher

Examples:

1. Student scribes single sentences or word groups that are disconnected, as assigned by teacher.

2. Student changes form, content, and/or word usage to make the text acceptable. (editing)

3. Student copies a previous draft or an edited draft after evaluation. (rewriting)

4. Student lists words, e.g., spelling, or fills in the blanks.

5. Student writes sentences dictated by teacher.

6. REWRITING

Definition:

For purposes of observation, rewriting is regarded as different from writing. To rewrite is to scribe a later draft of something already written.

Rewriting could entail merely copying. Rewriting is distinguished from the activity of editing in that the activity of rewriting occurs on a different day, in a different class, or on a different piece of paper.

Examples:

1. Student copies a previous draft after that draft has been evaluated and/or edited.

2. Student incorporates changes into a new draft.

Definition does not include:

Editing as one writes or changing a draft as the teacher (or peer) evaluates the same draft.

Examples:

1. Student erasing or writing over a first draft while writing it (writing).

2. Teacher suggesting changes in a draft during a conference with student (evaluating).

3. Student making changes on original draft after evaluation (editing).

7. SHARING OF WRITING

Definition:

The student shows or reads his or her own writing to another student or students. Also in this activity two or more students might exchange papers and read them aloud or silently.

Examples:

1. Informal sharing: as the student wishes, to share humor, phrasing, or other feature of a written draft with another student.

2. Formal sharing: the student is called upon to read to his group or class; other students may comment.

Definition does not include:

1. Students sharing ideas not yet written down.

2. Students sharing writing by other persons outside the class.

3. The teacher showing or reading one student's paper to other students if the teacher does so as a means of accomplishing some other activity, such as orienting, reviewing, or evaluating.

Examples:

1. Student proofreads another student's draft (evaluating).

2. Student questions teacher about the appropriateness of a particular phrase or sentence (evaluating).

3. Teacher makes suggestions to student about changes to be made in process (evaluating).

4. Teacher says, "read that back to me," so that student will reread orally in order to notice poor word choice or error (evaluating).

5. Teacher reads paper written earlier by a student as a means of introducing a topic (orienting).

8. EVALUATING

Definition:

This activity is an expression of a judgment about any written work, in whole or in part, which the student is preparing. This expression of judgment might be approval or disapproval.

Specifically, evaluating precedes the activity of editing, that is, the changing of a manuscript. Moreover, it is intended to induce the activity of editing.

This usage differs from common usage, as reported in the dictionary, which is "examine, estimate, ascertain, fix or appraise" the value of something. Our usage assumes all of these activities and presumes more, namely, one's expression of a judgment based on one's appraisal, and moreover, a judgment intended to elicit a specific activity.

"Evaluating" also conveys these arbitrary limitations of meaning:

1. It is confined to the student's written work or to any aspect of the preparation of that work.

2. It is normally an activity of the teacher, but it could be an activity of a student or a group of students.

3. Its purpose is affective. "Evaluating" is intended to elicit a response from the writer, either to continue present behavior or to modify it. To evaluate is to reinforce or to sanction (and possibly both at the same time).

Examples:

1. Teacher reads student's paragraph and suggests improvements.

2. "Isn't this a run-on sentence? What could you do to improve this?"

3. "Check the spelling of this word."

Definition does not include:

1. Assigning a grade to a written work (which normally occurs outside of the writing lesson and away from the classroom)

2. Merely (positive or negative) reinforcement for any purpose other than writing

Examples:

1. "You can do better."

2. "That's good" in response to a student's comment or answer

3. Writing letter grades or evaluative adjectives (e.g. "good," "fair," etc.) on a student's paper

9. EDITING

Definition:

To edit is to change a manuscript during or following the writing of that manuscript. The changing might consist of modifying or transforming the manuscript; the changing might also consist of deleting parts of the manuscript or adding to it.

Any of the changing probably entails proofreading. And editing may or may not follow the activity of evaluating.

Unlike rewriting, which is a separate and subsequent activity, editing is part of or an extension of writing. Editing always occurs on the manuscript as written, not on another piece of paper.

Examples:

1. Student perceives and corrects errors in spelling, punctuation, and word endings.

2. Two students, without the teacher, make changes in their manuscripts.

Definition does not include:

1. Teacher makes changes on manuscript without the student.

2. Evaluating

Examples:

1. Teacher reads the manuscript, without the student, makes changes and returns the manuscript to the student.

2. Teacher works with two or three students, including the author, and invites them to suggest corrections (evaluating).

DEFINITION OF CHARACTERISTICS OF ACTIVITIES

A. PARTICIPANTS: the persons who are involved in the activity. The characteristics under this classification are self-explanatory except for:

T with S (serial): this means that the teacher circulates among several students, speaking with each one for a few moments, then moves on or that the teacher is stationed in one place and is approached by students one at a time.

B. MODE: how the activity was carried out. The characteristics under this classification are self-explanatory.

C. MATERIALS: the materials used in an activity.

A/V: any audio-visual material, including filmstrip, tape recorder, overhead projector, record, chalk-board, or wall poster which does not contain any instructions the student is to follow.

Directive (commercial): any commercially produced material (dittoes, posters, teaching machine, etc.) which does contain directions the student is to follow.

Common experience: experiences of the students which are used in developing a lesson. Examples are a discussion of a trip to a museum, a discussion of customs followed in each family for a holiday, or a discussion of reasons that one writes letters. "Common experience" is normally coded as a characteristic of "orienting."

Reading material: this characteristic is checked when material read by the students is used in developing a lesson. The reading material is used in much the same way as "common experience."

Students' own writing: this characteristic is checked when writing produced by one or more students is used in developing a lesson. Examples are a teacher reading a student's paper as an example of style, or students exchanging papers and reading them as a proofreading exercise.

D. FOCI OF ACTIVITIES: Set #1 and Set #2
Set #1 consists of skills pertaining to the single sentence.

Spelling: (self-explanatory)

Capitalization: (self-explanatory)

Punctuation: use of "standard marks and signs"

Word usage: this includes skills oftern called "vocabulary," "word choice," "figures of speech," and idioms.

Format/Penmanship: manuscript conventions such as margins, spacing, indenting, headings, and forming letters.

Sentence syntax: "customary" arrangement of words in phrases and sentences into categories and sequence.

Set #2 consists of skills pertaining to the paragraph and paragraph sequence.

Paragraph: a group of sentences related to a common topic and to each other.

Paragraph sequence: two or more sequential paragraphs demonstrating the relationship of one phase of the subject to another.

Purpose/audience: addressing the intended topic, using the intended mode of discourse, or addressing the intended audience.

Form: If skills are being addressed which are unique to a certain form of writing, the observer writes in the name of that form and checks this column.
Forms include: letter, verse, story, essay, precis, etc.

GUIDELINES FOR USING THE CLASSROOM OBSERVATION GRID

1. The observation grid is a two-dimensional matrix that juxtaposes activities (listed vertically) and possible characteristics of activities (listed across the top). It thereby presents a series of blank columns, enabling the observer to place a check mark for each characteristic of each activity. Columns at the left of the Grid allow room for narrative and also for clock time for each activity.

2. The narrative portion of the grid has a temporary importance; it can help the observer to recall information for later coding or for later revision of observation. But the narrative portion is not susceptible to machine calculations.

3. Only the information coded by checkmarks on the Grid can be correlated with information from other sources. This coded information, therefore, will be the only durable and transferable record of what is observed.

4. The purpose of the codes is to enable the recording of two kinds of information: the duration of each activity and the sequence of those activities. Regarding the sequence of activities, recurrence and contiguity are important. In other words, what activities recur, and in what kinds of patterns do they recur? The authority of observed patterns of activities, therefore, will depend on the observers' reliability in recording the duration and sequence of successive activites. Accordingly, record the time at the beginning and the time at the end of each sequence.

5. The subscene changes when either of two cues occurs: (a) change in activity or (b) change in any subcategory of "participants." Changes in the other characteristics (mode, materials, or foci) of any activity will not change the subscene.

6. In general, ignore interruptions. If, however, an interruption either stops the writing lesson or takes the teacher away from the classroom, then note the time of the interruption and the time of the resumption of the class. If the class resumes with either a new activity or different participants, automatically code a new subscene.

APPENDIX G

Writing Instruction in the Elementary Schools:
Teaching Methods and Procedures

A Classified, Annotated Bibliography

Note: The articles in this bibliography include all entries in the ERIC data base whose descriptors include:

writing, or
expository writing, or
creative writing, or
writing skills, or
composition (literary),

AND

elementary education, or
elementary school students,

AND

instruction, or
teaching methods, or
teaching techniques, or
teaching procedures.

The bibliography is divided into ten sections. Nine reflect the nine activity constructs defined in Appendix F. The tenth section deals with other aspects of writing instruction, such as student characteristics. If an article discussed more than one of the activities, it was included under both headings.

Writing Instruction in the Elementary Schools:

Teaching Methods and Procedures

A CLASSIFIED, ANNOTATED BIBLIOGRAPHY

1: Presenting

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 48, 605-616.

New subjects are presented to the class as one group, but mechanics and skills are taught incidentally and privately. There are few lessons conducted for the class as a whole.

Cramer, B. B. & Cramer, R. L. Writing by imitating language models. Language Arts, 1975, 52, 1011-1014, 1018.

After orienting the students to a pattern-writing activity, specific words, images, patterns, and concepts not raised in the discussion are presented. Author feels this allows the teacher to be didactic in a natural way.

Hunter, E. Fostering creative expression. Childhood Education, 1968, 44, 369-373.

After children have had some writing experience and have developed confidence, assistance in the mechanics of usage is needed. The introduction of metaphor and simile does not have to include the use of these terms.

Jensen, J. M. British primary education and the language arts. Research in the Teaching of English, 1974, 8, 81-115.

Skills such as leaving space between words, indenting, etc., are presented as the teacher takes dictation from the child, rather than being introduced in isolation from the writing process. Exercises are prescribed as needed.

Krogness, M. M. Imagery and image-making. Elementary English, 1974, 51, 488-490.

Imagery is taught by presenting two sentences that describe the same action, one with imagery and one without imagery.

Minkoff, H. Teaching the transition from print to script analytically. Elementary English, 1975, 52, 203-204.

Author describes one way of teaching the skill of writing script to students. Includes five activities through which the relationship of print and script can be presented.

Vezey, J. J. Language arts: Curtain up on playwriting. _Teacher_, 1976, _94_, 52-56.

After the students have outlined a play to be written by the entire class, the teacher describes how dialogue should be written.

Works on ERIC microfiche

Project success for the SLD child. _Language Arts Guide_, 1974, ED 089 484.

Skills are presented during the "motivational" period which precedes writing and again during the evaluation period. The latter activity might or might not be reteaching. Presentation involves the teacher using the blackboard, followed by a review of the skill with the help of a child.

2: Giving Instructions

Published works

Golub, L. S. Stimulating and receiving children's writing: Implications for an elementary writing curriculum. *Elementary English*, 1971, *48*, 33-49.

Notes that the positive nature of the teacher's response to writing and not the type of directions, whether general or specific, used to accompany a stimulus for writing has the greatest effect on the product.

Minkoff, H. Teaching the transition from print to script analytically. *Elementary English*, 1975, *52*, 203-204.

Outlines how students can be instructed to complete five activities which will enable them to master writing script.

Terwilliger, P. N. & Turner, T. N. I hate you, Dr. T! A creative writing approach that knocks the sails out of your wind. *Elementary English*, 1975, *52*, 170-172, 186.

The instructions given for this "hate letter" activity are very specific. Only three minutes of writing are permitted, during which time students are not to look up from their paper or lift their pencils.

Works on ERIC microfiche

Project success for the SLD child. *Language Arts Guide*, 1974, ED 089 484.

SLD children should be given one-step directions.

3: Orienting

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 605-616.

Reading to children every day motivates them to write and improves their listening, oral, and written skills. Discussion should always precede writing. Instruction is usually individualized, but when the teacher is trying to motivate the class to write on a new subject, the lesson is presented to the whole group.

Cramer, B. B. & Cramer, R. L. Writing by imitating language models. Language Arts, 1975, 52, 1011-1014, 1018.

Teacher orients the class to a lesson on imitating language models by reading a story or poem and following the reading with a "sharing session" in which the class discusses the selection.

Ellis, H. Twenty-one way-out story starters and how to use them. Grade Teacher, 1969, 86, 95-100.

Suggests 21 sequential "story-starters" which provide a semester-long creative writing program. Also notes that reading the work of well-known poets will present examples of poetic language and stimulate writing.

Featherstone, J. Teaching writing. The New Republic, 1970, 163, 11-14.

Discusses the work of the Teachers and Writers Collaborative and reviews Koch's Wishes, Lies, and Dreams. Describes Koch's method of stimulating students to write by reading the poetry of other children to them.

Golub, L. S. Stimulating and receiving children's writing: Implications for an elementary writing curriculum. Elementary English, 1971, 48, 33-49.

The teacher's positive "reception" or acceptance of the student's writing is a stimulus to further writing.

Hahn, H. T. Elementary composition: A humanistic activity. Wisconsin English Journal, 1968, 10, 15-19. ED 039 213.

Reading stories to children is considered a catalyst for encouraging writing.

Hilberry, M. Children and poetry. *Reading Horizons*, 1972, *12*, 129-136.

In order to encourage children to enjoy poetry, author worked on the premise that all children love rhyme and asked them to imitate the rhyme schemes of favorite poems. Ten years later, the author read Koch's book and adopted his method of stimulating children by reading aloud the poetry of other children.

Hoffman, M. The other mouth: Writing in the schools. *Childhood Education*, 1970, *47*, 79-83.

Notes lively exercises for stimulating writing about personal experiences that were devised by members of the Teachers and Writers Collaborative.

Hunter, E. Fostering creative expression. *Childhood Education*, 1968, *44*, 369-373.

"Pump primers" such as thought-provoking pictures and stories stimulate writing.

Murray, D. Your elementary pupil and the writer's cycle of craft. *Connecticut English Journal*, 1969, *2*, 3-10. ED 040 210.

Students' senses should be stimulated and made aware of the environment before they can begin the "prewriting" stage.

Pietryka, A. & Searle, N. New life for a reading program. *Reading Horizons*, 1973, *13*, 132-134.

To elicit one sentence to describe a picture, the teacher discusses each child's picture with him.

Schneider, M. A pattern for story-writing. *Grade Teacher*, 1969, *87*, 102-103.

In a lesson on the structure of a story, the teacher orients the students by reading "Goldilocks and the Three Bears."

Shapiro, B. G. & Shapiro, P. P. Two methods of teaching poetry in the fourth grade. *Elementary English*, 1971, *48*, 225-228.

The first, "free lesson," approach involved students listening to the poetry of well-known writers before writing their own poems. The second, "semi-structured," approach consisted of a sequence of carefully planned activities. The authors found that the second orientation was slightly more effective in terms of the child's ability to write poems, although both methods effected improvement.

Smith, B. H. Spontaneous writing of young children. *Elementary English*, 1975, *52*, 187-189.

A number of activities and materials which will motivate children to write are suggested.

Steiner, R. Teaching writing to children. *Elementary English*, 1973, *50*, 964-966, 968.

Writing should be preceded by an exchange of ideas among the students.

Stroh, N. K. How a diary encouraged creative writing. *Elementary English*, 1969, *46*, 769-771.

On the day after reading excerpts from a diary she kept as a child, the author reread some of the passages and discussed them. Then she "gave the sales pitch" by asking them to write about themselves.

Terwilliger, P. N. & Turner, T. N. I hate you, Dr. T! A creative writing approach that knocks the sails out of your wind. *Elementary English*, 1975, *52*, 170-172, 186.

A challenge to write a "hate letter" to anyone present in the classroom stimulates writing.

Tiedt, I. M. A new poetry form: The diamante. *Elementary English*, 1969, *46*, 588-589.

The teacher oriented the class to a new poetry form by drawing the pattern on the board to help them to visualize it. This was followed by a discussion of the chief element of this form--contrast.

Vezey, J. J. Language arts: Curtain up on playwriting. *Teacher*, 1976, *94*, 52-56.

Students are stimulated to write a play as a group because each child can contribute to the final product.

Wright, E. Wishes, lies, and dreams: Pedagogical prescriptions. *Elementary English*, 1974, *51*, 549-556.

In this discussion of the methods of teaching poetry described by Kenneth Koch, the author states that Koch's orientation to poetry makes the child a respondent rather than a creator, because it requires that he fill in a prescribed form. Wright suggests that a more effective orientation to a poetry lesson is to encourage the child to write about something in which he is particularly interested.

Ziegler, A. The seasons of a writing workshop. *Teachers and Writers*, 1978, *10*, 36-41.

Recommends avoiding "sure fire gimmicks" which make students dependent on the teacher for ideas. The ultimate goal is for the student to find an internal stimulus for writing. Some suggestions for achieving this are discussions, "brainstorming," or sharing the poems of other students. The latter will "trigger" poems on similar themes.

Works on ERIC microfiche

Folta, B. Writing as leading the reader to a discovery. 1969. ED 039 227.

One activity suggested consisted of the teacher putting short descriptive phrases on index cards and asking each child to choose one and use it as the first line of a poem.

Furner, B. A. Creative writing for self-understanding: Approaches and outcomes. 1970. ED 052 184.

Orienting is described as a "motivational period" in which a picture, discussion, book, etc. stimulates writing.

Project success for the SLD child. Language Arts Guide, 1974. ED 089 484.

The orientation period in which children are told which skills are being used that day is identified as the "motivational period." It includes introduction of a picture or a topic on which the students are to write.

Toussaint, I. H. Poetry in the elementary school. 1972. ED 064 696.

Orient students to a lesson on haiku by reading some examples and discussing them.

4: Review

Published works

Schneider, M. A pattern for story-writing. *Grade Teacher*, 1969, *87*, 102-103.

Following an orientation to a lesson on the plan of a story, teacher reviewed the elements of an effective story, using "Goldilocks" as a model.

Stroh, N. K. How a diary encouraged creative writing. *Elementary English*, 1969, *46*, 769-771.

On the day following a writing lesson, the teacher reviews mechanical skills by writing errors from student papers on an overhead projector.

Vezey, J. J. Language arts: Curtain up on playwriting. *Teacher*, 1976, *94*, 52-56.

Before commencing a unit on playwriting, the teacher reviewed outlining skills.

Works on ERIC microfiche

Project success for the SLD child. *Language Arts Guide*, 1974. ED 089 484.

Constant reviewing of skills to train the memory is an important element of this program. After a new skill is presented by the teacher, it is immediately reviewed by having a student come to the blackboard. Before each writing lesson, the skills to be used are reviewed.

5: Writing

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 605-616.

In many classes that Blake observed, students had one 20-minute "free-writing" period each day. This frequency is based on the premise that children learn to write by writing.

Cramer, B. B. & Cramer, R. L. Writing by imitating language models. Language Arts, 1975, 52, 1011-1014, 1018.

Group-writing is an effective way to begin imitative writing. The teacher might ease the difficulty of getting started by contributing the first few lines.

Jensen, J. M. British primary education and the language arts. Research in the Teaching of English, 1974, 8, 81-115.

Cites Peaker's (The Plowden Children Four Years Later, London, 1971) idea that it is the philosophy of British educators to stress "free-writing." Mechanical correctness should not be emphasized; it is developed in response to need.

Murray, D. Your elementary pupil and the writer's cycle of craft. Connecticut English Journal, 1969, 2, 3-10. ED 040 210.

When the student is ready to write, he should do so as quickly and freely as possible, without worrying about handwriting and mechanics. He is writing for himself at this stage; trying to get things down on paper, Imposing a deadline is an effective artificial stimulus for writing.

Stroh, N. K. How a diary encouraged creative writing. Elementary English, 1969, 46, 769-771.

A period at the beginning of each day is set aside for writing in diaries.

Terwilliger, P. N. & Turner, T. N. I hate you, Dr. T! A creative writing approach that knocks the sails out of your wind. Elementary English, 1975, 52, 170-172, 186.

Students write their "hate letters" under a firm three-minute deadline, following specific instructions, and are assured that the mechanics of writing are not important to this exercise.

Works on ERIC microfiche

Project success for the SLD child. Language Arts Guide, 1974. ED 089 484.

Teachers attempt to have children write every day. At least one-fifth of the class should write on the board, which allows the class to evaluate content and mechanical skill.

6: Rewriting

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 48, 605-616.

Blake observed that rewriting might or might not occur after evaluation. Teachers might ask students to rewrite after reading only a few lines, because they did not feel the work was the student's best effort and believed that the student could evaluate and rewrite without the teacher's assistance.

Golub, L. S. Stimulating and receiving children's writing: Implications for an elementary writing curriculum. Elementary English, 1971, 48, 33-49.

Considers the primary purpose of rewriting not editing, but the transition from the public voice, or the child's initial response to a writing assignment, to the inner voice, which may produce unique or figurative language.

Herman, W. L. Is the display of creative writing wrong? Elementary English, 1970, 47, 35-38.

Work should be displayed even though it contains mechanical errors. However, after the first grade children should be encouraged to rewrite to improve handwriting, correct misspellings, produce even margins, etc. When rewriting will not significantly improve work, it should be displayed as it is.

Vezey, J. J. Language arts: Curtain up on playwriting. Teacher, 1976, 94, 52-56.

Two students are assigned the task of proofreading, editing, and revising a class-written play to be typed by the teacher in its final version.

Works on ERIC microfiche

Folta, B. Writing as leading the reader to a discovery. 1969. ED 039 227.

Students had the opportunity to discuss their final drafts with the teacher before passing them in.

7: Sharing of Writing

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 48, 605-616.

The students' work is displayed and collected in booklets for the purpose of sharing.

DeVries, T. D. Writing writing and talking writing. Elementary English, 1970, 47, 1067-1071.

Suggests that anything written by students may be shared with their peers. Students might use tape recorders to develop confidence in their speaking ability or read their papers to the class. Encourage students to share their writing by working in pairs. Typewritten papers should be displayed or dittoed work distributed. This adds importance to the students' efforts.

Hahn, H. T. Elementary composition: A humanistic activity. Wisconsin English Journal, 1968, 10, 15-19. ED 039 213.

A child reading aloud to the class a story he has dictated to the teacher will experience the pride of authorship and be motivated to try writing his own story.

Herman, W. L. Is the display of creative writing wrong? Elementary English, 1970, 47, 35-38.

Creative work should be displayed regardless of misspellings and mechanical errors. Proofreading or red marks by the teacher deprive the students of the feeling that the work is totally their own. Errors can be used as a basis for further instruction. The author distinguishes between creative writing, the expression of feeling and experience, and practical writing. In the latter, correctness should be stressed.

Jensen, J. M. British primary education and the language arts. Research in the Teaching of English, 1974, 8, 81-115.

Children's work is displayed without regard for mechanical imperfections.

Murray, D. Your elementary pupil and the writer's cycle of craft. Connecticut English Journal, 1969, 2, 3-10. ED 040 210.

Some suggestions for sharing writing are publication of books and newspapers as part of a writing workshop and the showing of papers to classmates as they evolve.

Schneider, M. A pattern for story-writing. Grade Teacher, 1969, 87, 102-103.

Students read their stories aloud, and the class criticizes them using a "story line" diagram on the blackboard as a reference.

Smith, B. H. Spontaneous writing of young children. Elementary English, 1975, 52, 87-89.

Students share their work by reading to the teacher or to the class for the purpose of motivation and acquiring writing skills through discussion.

Steiner, R. Teaching writing to children. Elementary English, 1973, 50, 964-966, 968.

Writing for an audience of peers motivates children to write. The students should read their own work to the class or display it on the wall.

Terwilliger, P. N. & Turner, T. N. I hate you, Dr. T! A creative writing approach that knocks the sails out of your wind. Elementary English, 1975, 52, 170-172, 186.

"Hate letters" are read aloud by volunteers. The conditions specified for this activity are that the entire class face away from the reader. The authors believe the exercise of writing and sharing "hate letters" will create an atmosphere conducive to creative expression.

Works on ERIC microfiche

Furner, B. A. Creative-writing for self-understanding: Approaches and outcomes. 1970. ED 052 184.

In individual writing activities, students should share ideas by reading their work aloud and discussing it with their classmates. This is an exercise in "creative listening" in which the listener enters into the writer's imagination.

Project success for the SLD child. Language Arts Guide, 1974. ED 089 484.

As part of the Daily Writing Program, students share their work by writing it on the blackboard. Sharing improves the social climate of the class and provides an opportunity for students to evaluate each other's work. Students who do not write on the board should share their work with a partner. This will develop proofreading skills.

8: Evaluating

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 48, 605-616.

Observed that it is common practice for the teacher and student to evaluate written work to see how it might be improved.

Cramer, B. B. & Cramer, R. L. Writing by imitating language models. Language Arts, 1975, 52, 1011-1014, 1018.

After the completion of a group-written poem, the teacher guides the students in an evaluation of how closely it follows the model. The class and teacher might decide that a departure from the pattern is more effective than adherence to the model and choose to retain it.

DeVries, T. D. Writing writing and talking writing. Elementary English, 1970, 47, 1067-1071.

Teacher evaluates after hearing student read his paper. One area of weakness should be identified and improved. Evaluation is an ongoing process.

Jensen, J. M. British primary education and the language arts. Research in the Teaching of English, 1974, 8, 81-115.

Author cites Blake's observation that in English primary schools, teachers and students evaluate written work together.

Schneider, M. A pattern for story-writing. Grade Teacher, 1969, 87, 102-103.

After hearing a classmate's story, students evaluate how well it adheres to the "story line" pattern.

Smith, B. H. Spontaneous writing of young children. Elementary English, 1975, 52, 87-89.

Offering the child suggestions about his written work--for example, suggesting that he combine sentences--serves the two-fold purpose of motivating the student to write and reinforcing the skills for more effective writing.

Steiner, R. Teaching writing to children. Elementary English, 1973, 50, 964-966, 968.

Written evaluations by teachers should suggest improvements or alternatives, rather than make negative comments or assign grades.

Works on ERIC microfiche

Folta, B. Writing as leading the reader to a discovery. 1969. ED 039 227.

Suggests that the teacher should be available for consultation after the student finishes writing, in order to "praise, ask questions, suggest cross-outs." This is called "immediate feedback" and is considered a powerful motivation for writing.

Project success for the SLD child. Language Arts Guide, 1974. ED 089 484.

The learning of language skills occurs during the evaluation period of approximately 15 minutes each day, when teacher and students discuss what members of the class have written on the board. Evaluative discussions should focus primarily on content, but the mechanics of usage and handwriting should be mentioned as well. Emphasizing the latter will discourage students from enjoying writing. The period should be dominated by student discussion, with the teacher asking guiding questions.

9: Editing

Published works

Chase, N. C. Children's writing: The product. *Elementary English*, 1973, *50*, 977-981.

Only the student should edit his work although seeking and receiving advice is most important.

Hahn, H. T. Elementary composition: A humanistic activity. *Wisconsin English Journal*, 1968, *10*, 15-19. ED 039 213.

Teacher and classmates should assist individual students in proofreading their work.

Hoffman, M. The other mouth: Writing in the schools. *Childhood Education*, 1970, *47*, 79-83.

Expresses the belief held by the Teachers and Writers Collaborative that mechanics are less important than expression. However, most of the teacher/writers believe that students will choose to edit their work as they develop pride in being competent writers.

Humphrey, J. W. & Redden, S. R. Encouraging young authors. *Reading Teacher*, 1972, *25*, 643-651.

Discussion of the Young Authors Project, which publishes student writing. After the dialogue of improvisational drama was transcribed, an editing committee checked the manuscript for naturalness of dialogue and clarification of action.

Murray, D. Your elementary pupil and the writer's cycle of craft. *Connecticut English Journal*, 1969, *2*, 3-10. ED 040 210.

Editing is referred to as "rewriting." It should be undertaken by the writer alone.

Smith, B. H. Spontaneous writing of young children. *Elementary English*, 1975, *52*, 187-189.

Proofreading might be done by the writer himself or by several or more students.

Stroh, N. K. How a diary encouraged creative writing. *Elementary English*, 1969, *46*, 769-771.

The student reads what he has dictated to the teacher to "catch his own mistakes."

Vezey, J. J. Language arts: Curtain up on playwriting. *Teacher*, 1976, *94*, 52-56.

After the entire class has written a play, two students proofread, edit, and revise the first draft.

Works on ERIC microfiche

Furner, B. A. Creative-writing for self-understanding: Approaches and outcomes. 1970. ED 052 184.

After group dictation, students read the story aloud to proofread. The teacher makes changes only as the students direct.

Project success for the SLD child. *Language Arts Guide*, 1974. ED 089 484.

During the evaluation period when the class discusses what individual students have written on the board, students should be encouraged to change their own work with the assistance of the class. The students who did not write at the board should pair up with a classmate to proofread their paper.

10: Other Issues

Teacher's Attitude

Published works

Blake, H. E. Written composition in English primary schools. Elementary English, 1971, 605-616.

Primary school teachers are notable for maintaining an informal, non-threatening, and encouraging atmosphere in the classroom.

Chase, N. C. Children's writing: The product. Elementary English, 1973, 50, 977-981.

"Acceptance" should guide the teacher's actions. Positive comments should replace negative comments.

DeVries, T. D. Writing writing and talking writing. Elementary English, 1970, 47, 1067, 1071.

Teachers should strive to be positive and understanding in their comments on students' journals.

Ellis, H. M. Twenty-one way-out story-starters and how to use them. Grade Teacher, 1969, 86, 95-100.

Praising students' work encourages them to write.

Golub, L. S. Stimulating and receiving children's writing: Implications for an elementary writing curriculum. Elementary English, 1971, 48, 33-49.

Defines "receiving" students' writing as listening to or reading the child's message and accepting it in the manner in which it was written, without criticism. The teacher's response stimulates the student to respond in oral or written language. "Receiving" involves accepting the child's views and world view. It creates a new stimulus for the next writing activity.

Hoffman, M. The other mouth: Writing in the schools. Childhood Education, 1970, 47, 79-83.

Teachers should not consider any subject taboo in the inner-city school.

Hunter, E. Fostering creative expression. Childhood Education, 1968, 44, 369-373.

Teachers must maintain an "accepting classroom environment" in order to encourage creative activity.

Smith, B. H. Spontaneous writing of young children. *Elementary English*, 1975, *52*, 187-189.

Emphasizes the need for teachers to be "dependable, trustworthy, and consistent" in order for the children to write spontaneously.

Terwilliger, P. N. & Turner, T. N. I hate you, Dr. T! A creative writing approach that knocks the sails out of your wind. *Elementary English*, 1975, *52*, 170-172, 186.

The teacher should contribute to the tense atmosphere required in this exercise by "prodding, pushing, bantering, and challenging."

Ziegler, A. The seasons of a writing workshop. *Teachers and Writers*, 1978, *10*, 36-41.

No topic should be considered by the teacher to be too emotional or personal. Some students need to write for its therapeutic value, and teachers should treat this need with sensitivity.

Works on ERIC microfiche

Nikoloff, S. B. The relationship of teacher standards to the written expression of fifth and sixth grade children. 1967. ED 018 407.

A study of 1,000 student essays with regard to teacher standards as characterized by a Teacher Writing Standards Inventory indicated that there is not significant difference between essays by students of teachers who hold "less strict" standards and those who hold "more strict" standards. "Less strict" standards promote the following: "1) acceptance of every child's written expression, 2) separation of the creative and the editing functions, 3) emphasis on expression of ideas rather than on spelling and mechanics, 4) frequent opportunity for writing of an imaginative and personal nature, and 5) diagnosis and use of children's errors for future teaching rather than for immediate fault-finding on the child's paper."

Project success for the SLD child. *Language Arts Guide*, 1974. ED 089 484.

Desirable qualities in the teacher of SLD children are "patience, sympathy, and resourcefulness" in coping with emotional and behavioral problems. Outlines general rules that a teacher should follow to achieve a good learning environment.

Student Characteristics

Published works

none

Works on ERIC microfiche

Gray, G. W. & Galloway, E. B. Teaching language arts skills to disadvantaged students. 1972. ED 072 454.

Authors accept Gertrude Noar's (Teaching the Disadvantaged, 1967) definition of cultural disadvantage due to poverty as well as Ruth Strickland's (Language Arts in the Elementary School, 1969) view that some middle-class children are culturally disadvantaged in the sense that they do not enjoy contact with people who care about their intellectual development.

Project success for the SLD child. Language Arts Guide, 1974. ED 089 484.

A language arts program developed to prevent educational failure for the child with a specific language disability, i.e.,the child who has demonstrated difficulty in reading, writing, spelling, or listening with facility despite a normal IQ. Estimates SLD children make up 10-20% of the school population. The Language Arts Guide supports the idea that the SLD child learns best through a program which integrates all areas of language--reading, writing, spelling, speaking, and listening.

Shapiro, B. G. & Shapiro, P. P. An evaluation of poetry lessons with children from less advantaged backgrounds. 1971. ED 047 040.

The same methods that were used to teach poetry to students from upper middle class backgrounds (study documented in 1970) were equally effective in teaching children from less advantaged backgrounds. The two methods carried out consisted of a "free" and "semi-structured" approach. The "free" approach stressed listening to the work of famous poets. The students were free to comment, but the teacher did not force discussion. The "semi-structured" approach consisted of carefully structured group and individualized activities, which included the sharing of ideas. Less poetry was read aloud, but it included the work of children as well as adults. Both methodologies resulted in an increase in the quantity and an improvement in the quality of the students' poetry among both socioeconomic groups.

APPENDIX H

Evolution of the Observation Grid

In the first observation cycle, observers used a split sheet for recording events in simple narrative form: the left side for what happened and the right side for impressions or inferences. All narratives followed the simple syntax of the independent clause in the present tense; subject, verb, and complement, and observers used conventional abbreviations as appropriate.

Teacher tells students about paragraphs. (t, ss, para)

Student asks about complex sentence. (s?t, sent)

The split sheets were on NCR paper, so that the observer and teacher could each have a copy; a third copy went to a team member who had not observed the class. Later, in a trinary meeting, these three persons reviewed the record of the observation.

As a result of these procedures for every observation during the school year, team members evolved a grid, or matrix, which displayed activities (in the left-hand vertical column) and characteristics of activities (horizontally across the top); the most developed form of the matrix presented the description of an activity, its code number, and the clock time of its beginning and ending; it also presented a series of columns across the page wherein the observer could place check marks for the appropriate characteristics of any given activity.

The final matrix was the tenth version of the original split-sheet narratives. Following is a notation of the major changes in each successive version.

Summary: Evolution of the Observation Grid

Version	Features
1. (prior to first observation cycle)	Accommodates encyclopedic reporting: observations on the left and observer's impressions on the right; 1 1/2 sheets; observer gives one copy of narrative (left-hand sheet) to teacher and retains copy of narrative with observer's impressions. This design was rejected (in plenary meeting) in favor of Version #2.
2. (obs. cycles #1 and #2)	Version #1 modified by procedural change. Observer gives teacher entire copy of observation (both narrative and impression) and another copy to third team member.
3. (interim, 10/13/79)	A list of observed behavior in cycles #1 and #2 and a blank matrix for distinguishing between activities and characteristics of those activities.
4. (plenary meeting 11/17/79)	A grid based on items in 10/13 list, juxtaposing activities and characteristics. Evolved from trinary meeting #13. Grid was not operational, but it was the first specification of activities and characteristics.
5. (12/10/79 - 1/11/80, used in obs. cycles #5 and #6)	The first open-ended grid, allowing continuous observing, recording activities by code number.
6. (1/28 - 2/7/80, used in obs. cycle #7)	Activities stabilized at 9 in number; skills rearranged in 3 categories.
7. (2/25 - 3/6/80, used in obs. cycle #8)	Version #6 modified by rearranging skills into 2 categories.
8. (4/7 - 4/24/80, used in obs. cycle #9)	Version #7 modified to specify subscene cues.
9. (5/5 - 5/15/80, used in obs. cycle #10)	2 modifications of version #8: "Purpose" and "audience" added to skills, and "pre-writing" added as activity.
10. (5/31/80, Plenary meeting)	2 significance modifications: (1) "Skills" omitted in favor of observable "foci of activities" and (2) "pre-writing" omitted because it had not been observed.

(Version 1: 1½ pages)

Classroom ____________________ (Version 2: 1 page) IMPRESSIONS

Observer ____________________

Date ____________________

OBSERVATIONS

(Version 3) 10/13

Characteristics of Activities → ↓Activities									Remarks

10/13/79 (Version 3)

List of activities and characteristics of observed instruction abstracted from minutes of trinary meeting to date.

1. editing by teacher
2. eliciting correct spelling
3. teacher offers encouragement
4. evaluation
6. making assignments
7. outlining
9. proofreading
10. questioning by students
11. reading
12. reading together
13. reading writing aloud
14. reenforcing by teacher
15. reviewing
16. sharing of writing by students
17. summarizing by teacher
18. teacher/student interacting
19. teaching or reenforcing basic skills
20. encouraging students to listen
21. teaching students to analyze
22. (see 28)
23. using A/V materials (anything that helps child--need not be mechanical)
24. using directed materials
25. students working together
28. vocabulary
29. using shared experiences
30. student solicits response
31. a. teacher assists student at teacher's desk
    b. assist at student's desk

(Version 4)
Draft, for discussion at
11/17/79 Plenary Meeting

	Persons						Medium		(?)		Direction		materials					Time		mechanical skills						organizational skills			
	T with whole class	T with group of SS	T with one student	Group of SS (without T)	Pair of SS (without T)	SS working singly	Oral	SIlent	In-process	Out of process	T-directed	S-directed	A/V	Directed (commercial)	Directed (teacher-made)	Common experience	Students' own writing	Time start	Time stop	penmanship	punctuation	capitalization	spelling	vocabulary	syntax	categorizing	selecting	putting in series	REMARKS
Editing																													
Evaluating:																													
Summative +																													
Summative -																													
Formative +																													
Formative -																													
Outlining																													
Proofreading																													
Questioning																													
Reading																													
Reviewing																													
Sharing writing																													
Summarizing																													
Writing																													
Rewriting																													
Presenting info*																													
Orienting*																													
Giving Instrns*																													

*new activity

CRW/NIE

(Version 5) 12/10/79-1/11/80

1. EDITING
2. EVALUATING
3. GIVING INSTRUCTIONS
4. MONITORING
5. ORIENTING
6. OUTLINING
7. PROOFREADING
8. READING
9. REVIEWING
10. REWRITING
11. SHARING OF WRITING
12. WRITING

CLASSROOM________

OBSERVER________

DATE________

PAGE________

			Mode					Persons								Materials					Skills I						Skills II		
TIME	NARRATIVE (OF SUBSCENES)	ACTIVITY	Telling	Questioning	Silent	Within writing process	Outside writing process	T with whole class	T with group of SS	T with one student	Group of SS (without T)	Pair of SS (without T)	SS working singly	T-directed	S-directed	A/V	Directed (commercial)	Directed (teacher made)	Common experience	Students' own writing	penmanship	punctuation	capitalization	spelling	vocabulary	syntax	categorizing	selecting	putting in series

(Version 6) 1/28- 2/7

1. PRESENTING NEW INFORMATION
2. GIVING INSTRUCTIONS
3. ORIENTING
4. REVIEWING

5. WRITING
6. REWRITING
7. SHARING OF WRITING

8. EVALUATING
9. EDITING

CLASSROOM________

OBSERVER ________

DATE ________

PAGE ________

			MODE					PARTICIPANTS							MATERIALS						SKILLS I						SKILLS II			SKILLS III		
TIME	NARRATIVE (OF SUBSCENES)	ACTIVITY	Telling	T Q/S responds	T Q/no response	S Q/T responds	S Q/no response	T with whole class	T with group of SS	T with S (extended)	T with S (serial)	Group of SS (without T)	Pair of SS (without T)	SS working singly	A/V	Directed (commercial)	Directed (teacher made)	Common experience	Students' own writing	Reading material	Spelling	Capitalization	Vocabulary	Penmanship	Format	Outlining	Sentence meaning	Punctuation	Sentence syntax	Paragraph	Paragraph sequence	Verse

CRW/NIE

(Version 7) 2/25-3/6

1. PRESENTING
2. GIVING INSTRUCTIONS
3. ORIENTING
4. REVIEWING
5. WRITING
6. REWRITING
7. SHARING OF WRITING
8. EVALUATING
9. EDITING

CLASSROOM________

OBSERVER________

DATE________

PAGE____

NARRATIVE (OF SUBSCENES)	ACTIVITY	MODE				PARTICIPANTS						MATERIALS						SKILLS I						SKILLS II			
		Telling	T Q/S responds	I Q/no response	S Q/T responds	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	A/V	Directed (commercial)	Directed (teacher made)	Common experience	Students' own writing	Reading material	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Outlining	Sentence syntax	Paragraph	Paragraph sequence	Form:
TIME:																											

Summary of visit
(on final sheet):

A83

CRW/NIE

SUBSCENE CUES

(Version 8) 4/7-4/24

CLASSROOM_______________

OBSERVER_______________

DATE_______________

PAGE_______________

ACTIVITIES

PRESENTING (1)
GIVING INSTRUCTIONS (2)
ORIENTING (3)
REVIEWING (4)

WRITING (5)
REWRITING (6)
SHARING OF WRITING (7)

EVALUATING (8)
EDITING (9)

TIME	NARRATIVE		PARTICIPANTS						MODE				MATERIALS						SKILLS I						SKILLS II			
			T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	Telling	T Q/S responds	T Q/no response	S Q/T responds	A/V	Directed (commercial)	Directed (teacher made)	Common experience	Students' own writing	Reading material	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Outlining	Sentence syntax	Paragraph	Paragraph sequence	Form:

Summary of visit (on final sheet):

l

(Version 9)   5/5-5/15

SUBSCENE CUES

CLASSROOM________
OBSERVER________
DATE________
PAGE________

ACTIVITIES

PRESENTING (1)
GIVING INSTRUCTIONS (2)
ORIENTING (3)
REVIEWING (4)
[PREWRITING (10)]
WRITING (5)
REWRITING (6)
SHARING OF WRITING (7)

EVALUATING (8)
EDITING (9)

		PARTICIPANTS						MODE				MATERIALS						PREWRITING SKILLS							WRITING SKILLS			
TIME	NARRATIVE	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	Telling	T Q/S responds	T Q/no response	S Q/T responds	A/V	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form:

Summary of visit (on final sheet):

CRW/NIE FINAL OBSERVATION GRID (edited at 5/31 plenary meeting) (Version 10)

SUBSCENE CUES

ACTIVITIES

PRESENTING (1)
GIVING INSTRUCTIONS (2)
ORIENTING (3)
REVIEWING (4)

WRITING (5)
REWRITING (6)
SHARING OF WRITING (7)

EVALUATING (8)
EDITING (9)

CLASSROOM ______________

OBSERVER ______________

DATE ______________

PAGE ______________

TIME	NARRATIVE		PARTICIPANTS						MODE				MATERIALS						FOCI OF ACTIVITIES										
			T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	Telling	T Q/S responds	T Q/no response	S Q/T responds	A/V	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form:

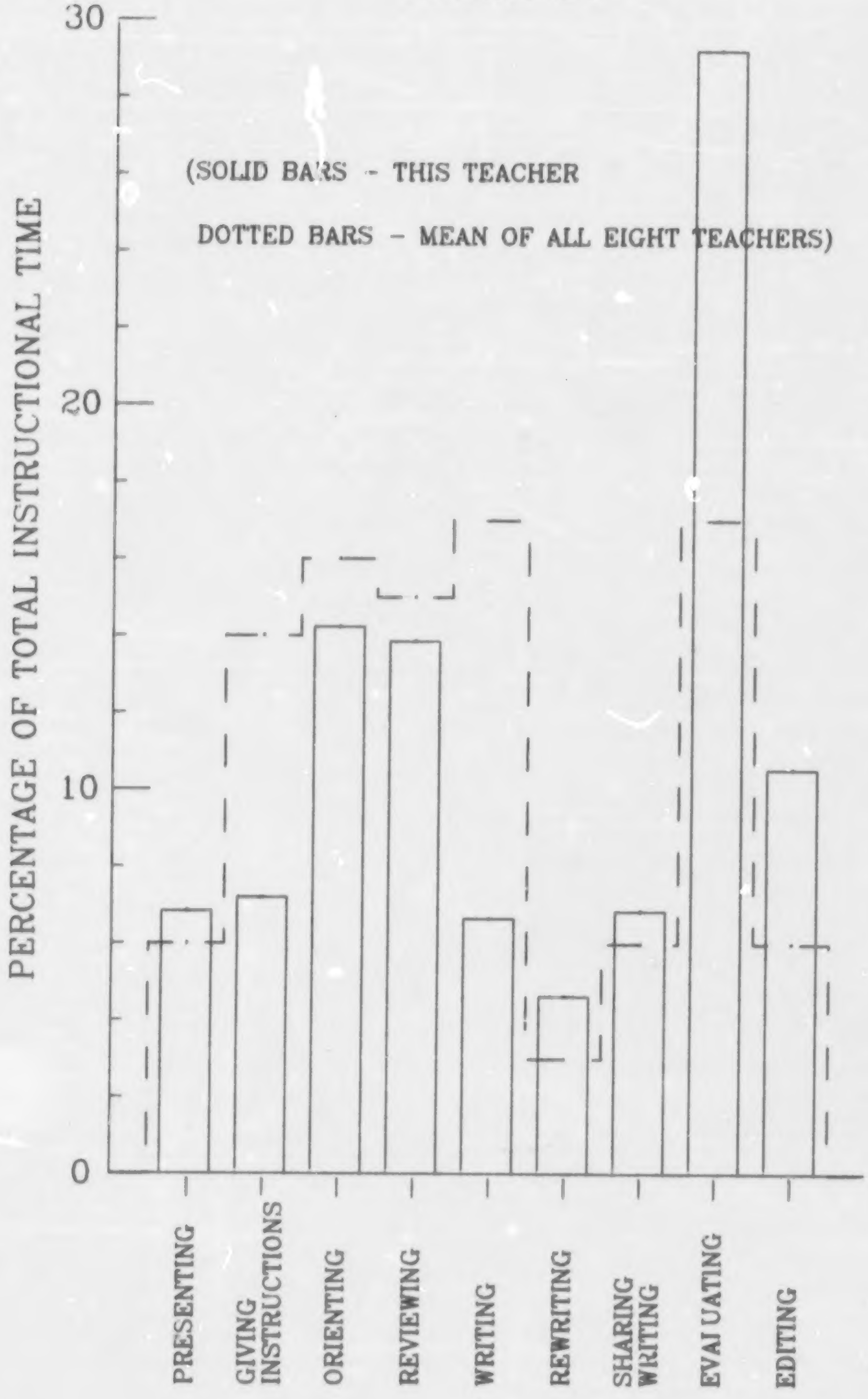
Summary of visit (on last sheet):

APPENDIX I

Percentage of Time Spent on Each Activity, by Teacher

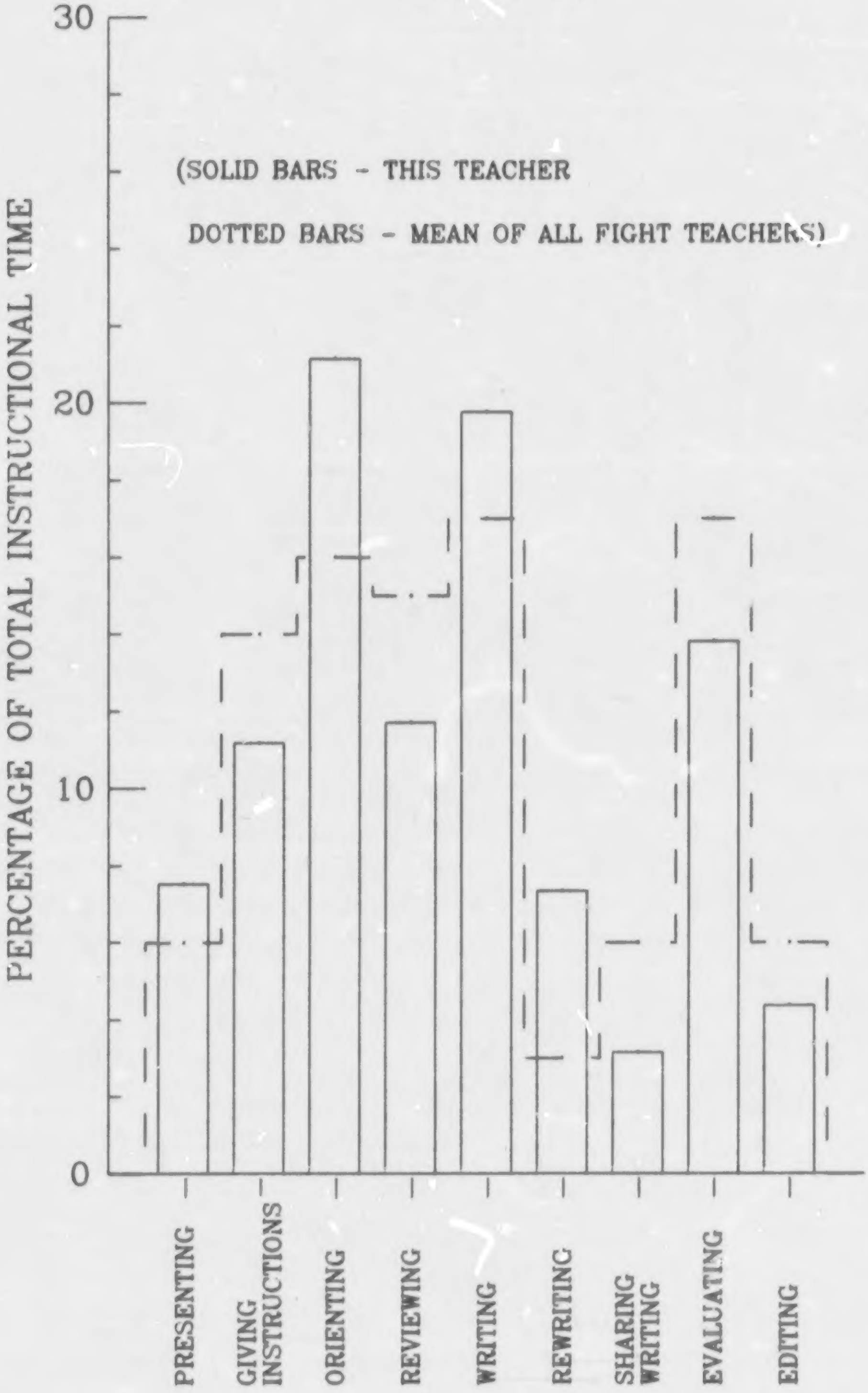
PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 31



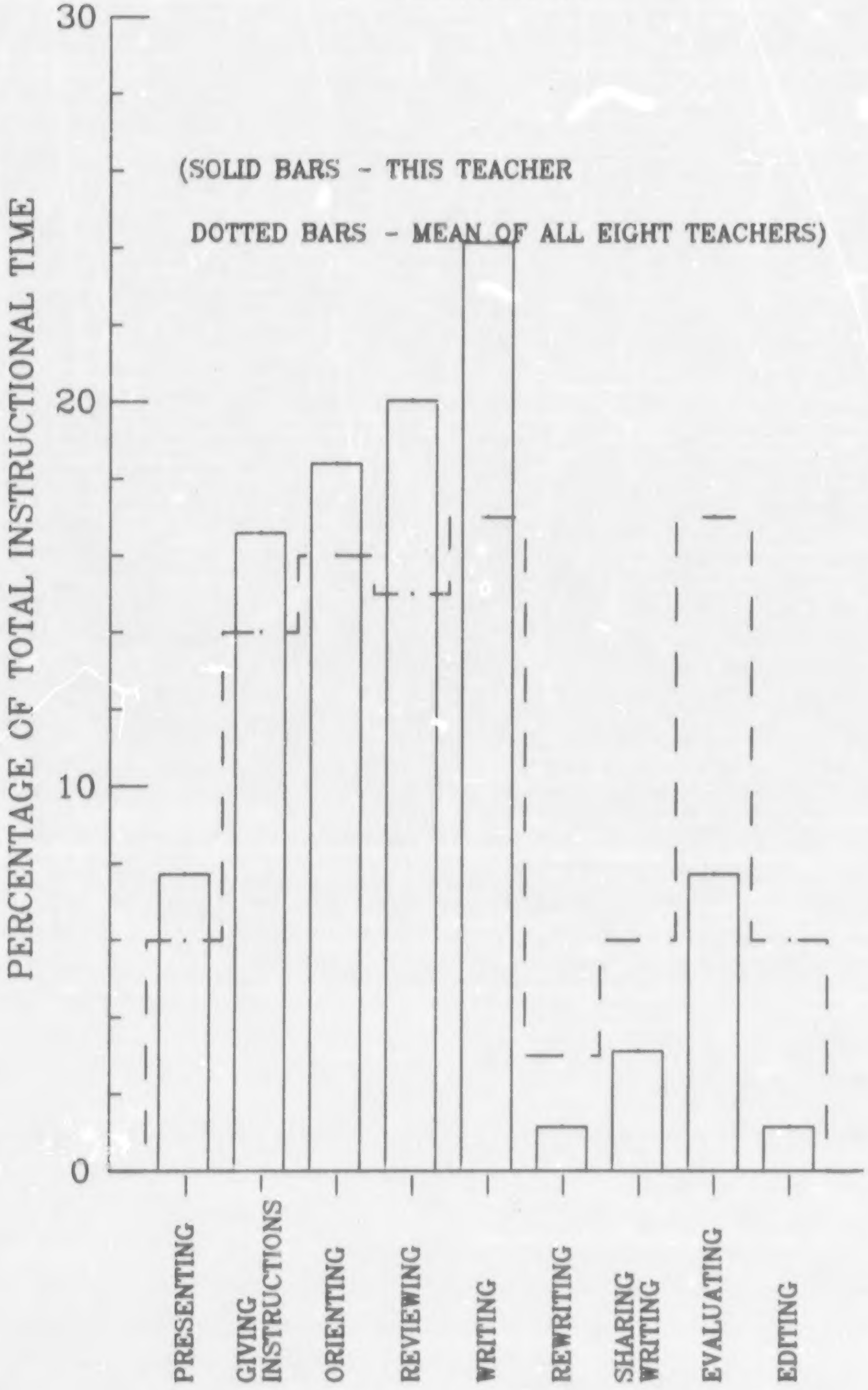
PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 32



PROPORTION OF TIME SPENT IN EACH ACTIVITY

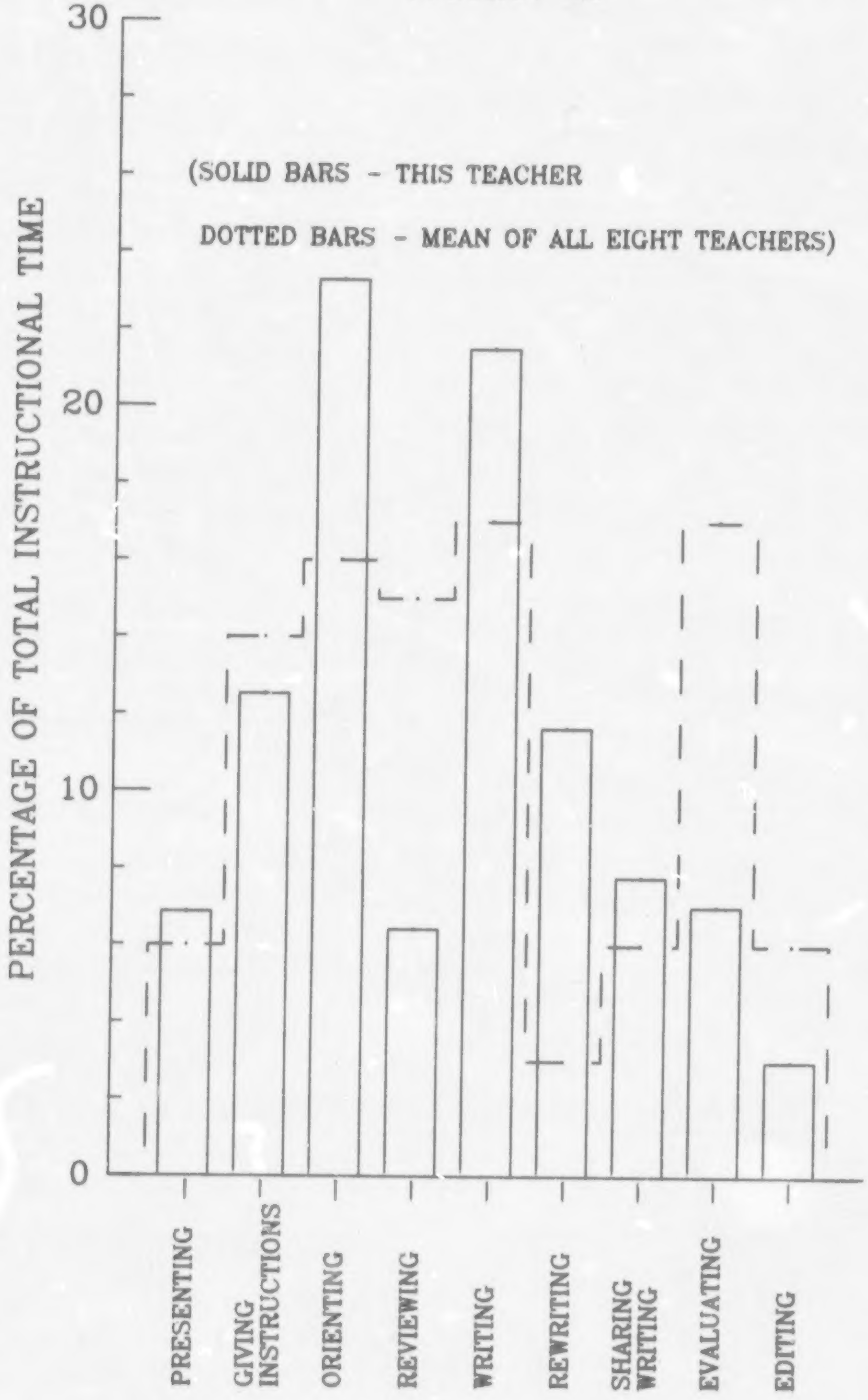
Teacher 41



A92

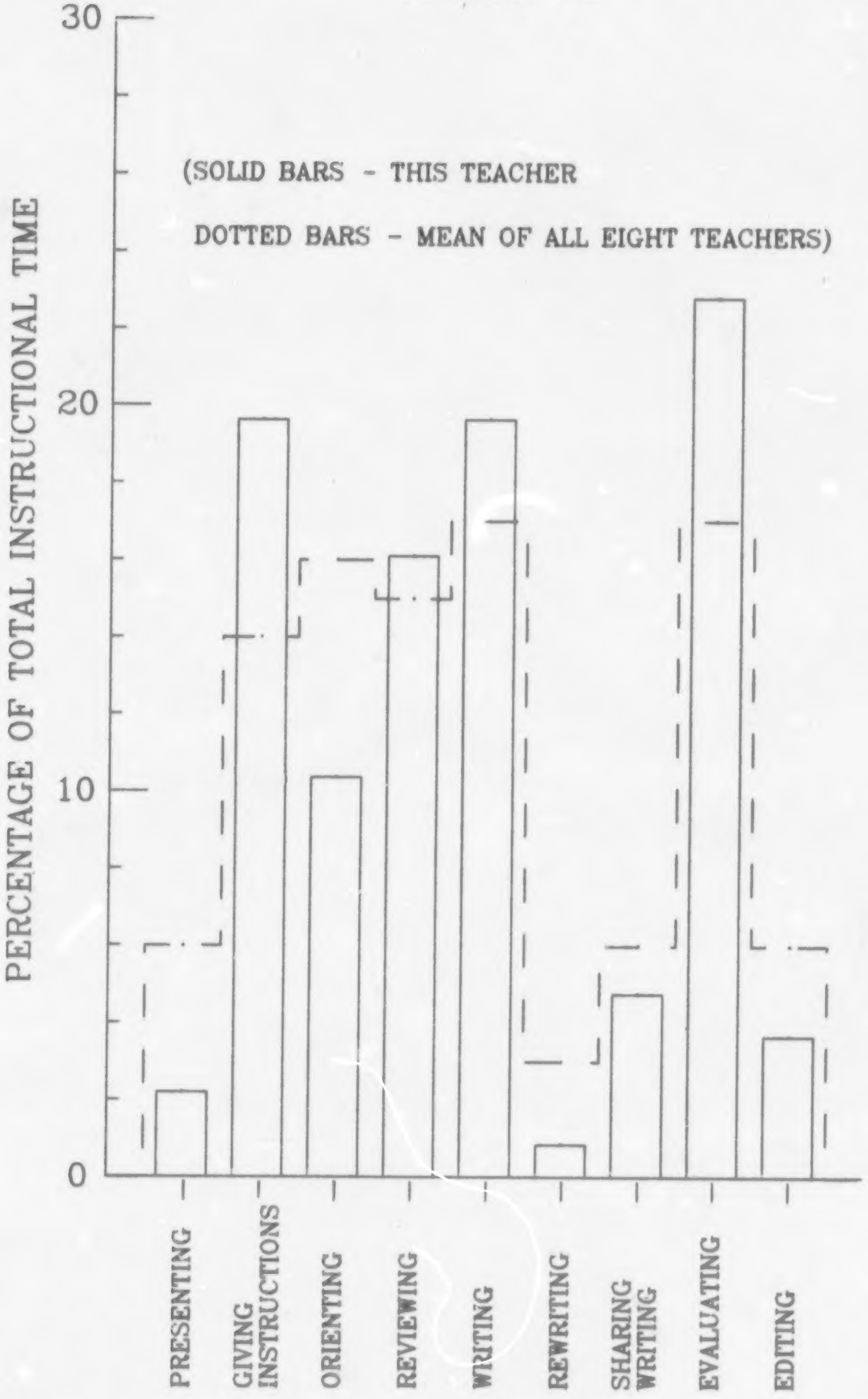
PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 42



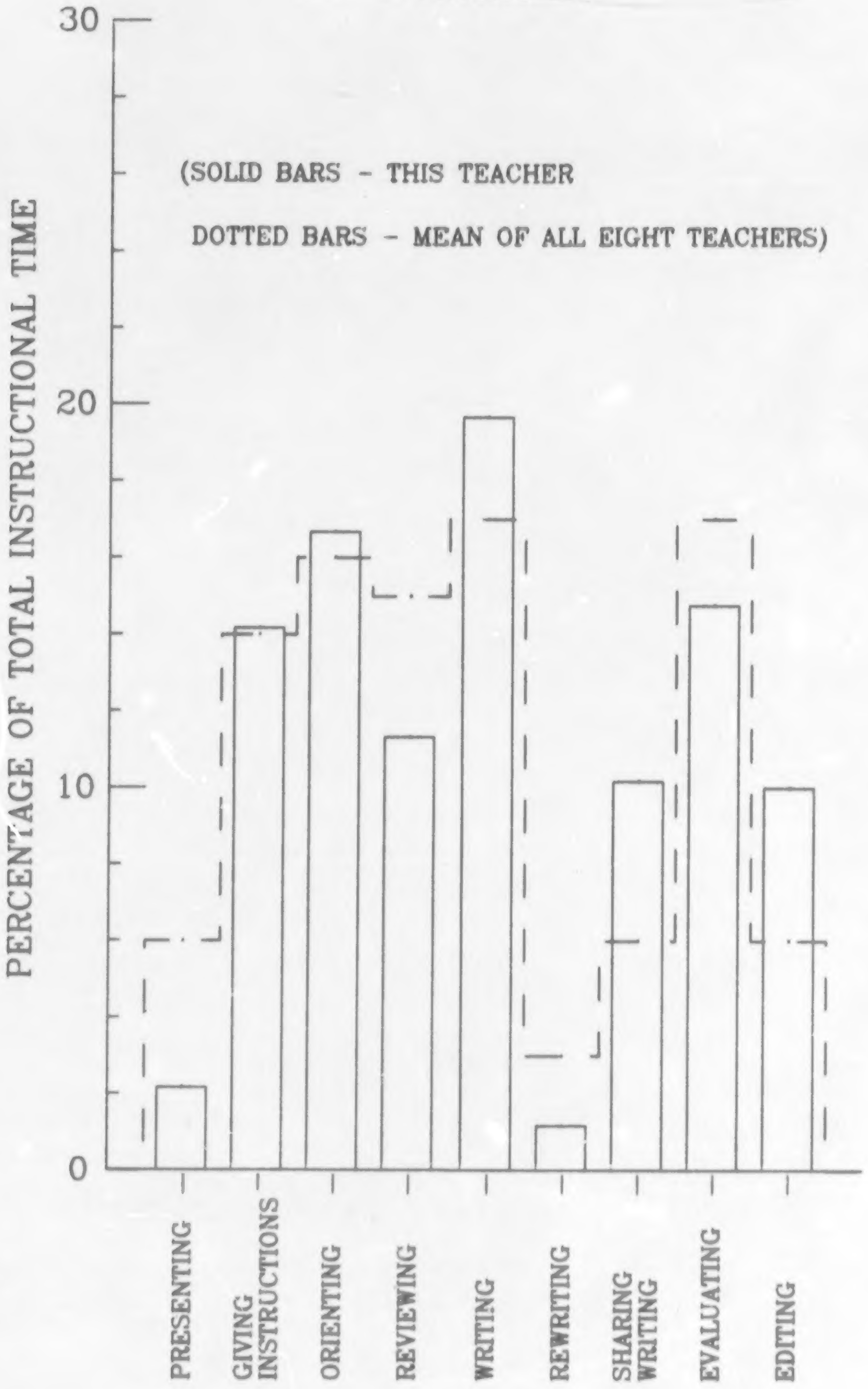
PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 51



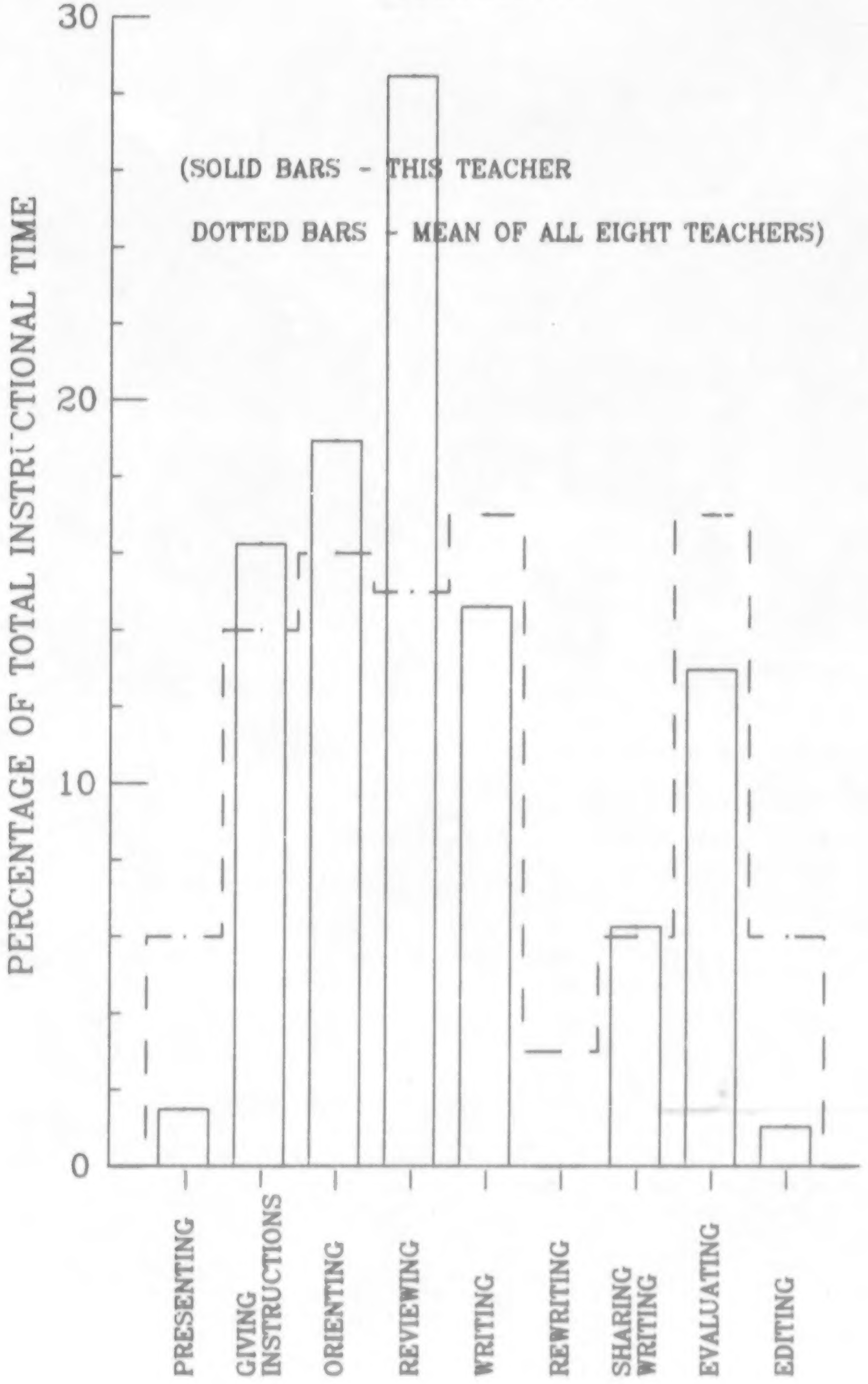
PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 52



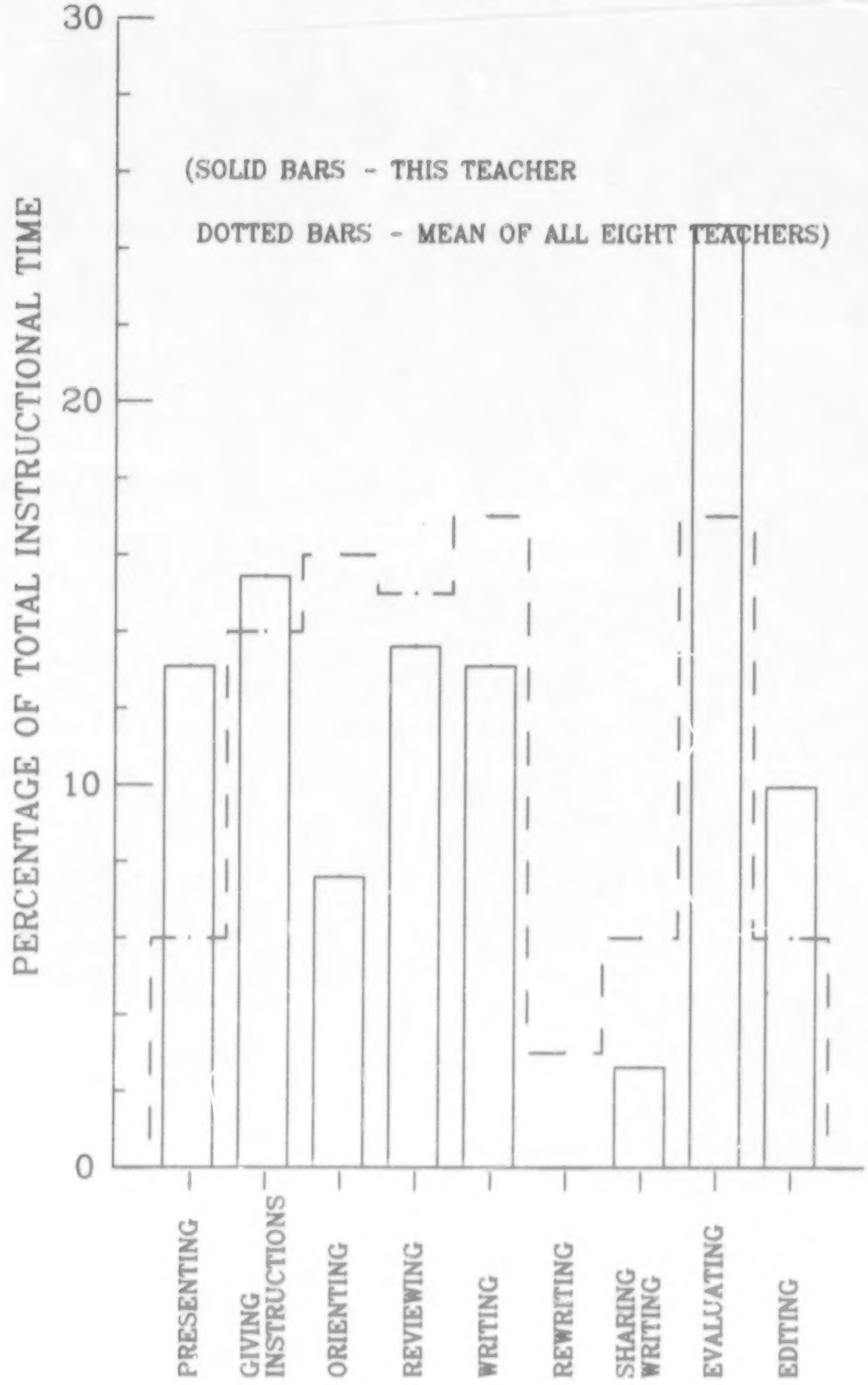
PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 61



PROPORTION OF TIME SPENT IN EACH ACTIVITY

Teacher 62



APPENDIX J

Characteristics of Activities, by Teacher

Teacher 31

Relationships Between Activities and Participants

ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
	PARTICIPANTS						
1. PRESENTING	83.3%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2. GIVING INSTUCTIONS	52.0	40.0	4.0	0.0	4.0	0.0	0.0
3. ORIENTING	80.0	11.5	0.0	0.0	0.0	0.0	7.7
4. REVIEWING	47.8	30.4	8.7	0.0	0.0	0.0	13.0
5. WRITING	0.0	0.0	28.6	0.0	14.3	42.9	14.3
6. REWRITING	0.0	33.3	0.0	0.0	0.0	33.3	33.3
7. SHARING OF WRITING	0.0	70.6	5.9	0.0	5.9	0.0	17.6
8. EVALUATING	10.0	35.0	25.0	15.0	0.0	5.0	10.0
9. EDITING	6.7	40.0	20.0	13.3	0.0	0.0	20.0
TOTAL	39.2%	32.4%	9.5%	3.4%	2.0%	3.4%	10.1%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

A100

Teacher 31

Relationships Between Activities and Modes and Materials

ACTIVITY	MODE					MATERIALS						
	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	58.5%	25.0%	0.0%	0.0%	41.7%	25.0%	0.0%	8.3%	16.7%	0.0%	8.3%	41.7%
2. GIVING INSTUCTIONS	68.0	20.0	0.0	4.0	8.0	36.0	4.0	16.0	4.0	0.0	36.0	24.0
3. ORIENTING	50.0	19.0	0.0	0.0	30.8	42.3	0.0	11.5	15.4	11.5	3.8	19.2
4. REVIEWING	34.8	60.9	0.0	4.3	13.0	34.8	0.0	0.0	13.0	0.0	30.4	39.1
5. WRITING	0.0	14.3	0.0	14.3	71.4	14.3	0.0	0.0	0.0	14.3	42.9	42.9
6. REWRITING	33.3	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.0	33.3	66.7
7. SHARING OF WRITING	23.5	47.1	0.0	0.0	29.4	58.8	0.0	0.0	0.0	0.0	76.5	23.5
8. EVALUATING	55.0	35.0	5.0	10.0	15.0	25.0	15.0	10.0	10.0	5.0	40.0	20.0
9. EDITING	26.7	33.3	0.0	0.0	40.0	13.3	0.0	6.7	0.0	0.0	73.3	20.0
TOTAL	43.9%	32.4%	3.4%	3.4%	26.4%	33.8%	2.7%	7.4%	8.1%	3.4%	36.5%	27.7%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 31

Relationships Between Activities and Foci of Activities

	FOCI											
ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	8.3%	8.3%	16.7%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	50.0%
2. GIVING INSTUCTIONS	24.0	24.0	28.0	4.0	32.0	28.0	4.0	8.0	24.0	24.0	4.0	48.0
3. ORIENTING	3.8	3.8	3.8	0.0	7.7	7.7	0.0	15.4	7.7	3.8	0.0	76.9
4. REVIEWING	17.4	39.1	39.1	0.0	39.1	21.7	0.0	17.4	17.4	17.4	0.0	43.5
5. WRITING	28.6	28.6	28.6	14.3	28.6	42.9	0.0	28.6	0.0	0.0	0.0	28.6
6. REWRITING	66.7	66.7	66.7	33.3	66.7	66.7	0.0	33.3	33.3	33.3	0.0	33.3
7. SHARING OF WRITING	64.7	58.8	64.7	0.0	64.7	53.8	0.0	0.0	58.8	58.8	5.9	35.3
8. EVALUATING	40.0	45.0	40.0	15.0	25.0	30.0	0.0	5.0	25.0	25.0	0.0	50.0
9. EDITING	20.0	40.0	20.0	20.0	20.0	20.0	6.7	6.7	13.3	13.3	6.7	33.3
TOTAL	25.7%	31.1%	30.4%	6.1%	28.4%	25.7%	1.4%	12.8%	20.3%	19.6%	2.0%	48.6%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 32

Relationships Between Activities and Participants

	PARTICIPANTS						
ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1. PRESENTING	57.1%	0.0%	0.0%	0.0%	14.3%	0.0%	28.6%
2. GIVING INSTUCTIONS	70.6	5.9	0.0	5.9	0.0	0.0	17.6
3. ORIENTING	70.6	11.8	0.0	0.0	0.0	5.9	11.8
4. REVIEWING	69.2	7.7	7.7	0.0	0.0	7.7	7.7
5. WRITING	0.0	0.0	0.0	0.0	0.0	85.7	14.3
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	100.0	0.0	0.0	0.0	0.0	0.0	0.0
8. EVALUATING	0.0	0.0	16.7	33.3	0.0	0.0	50.0
9. EDITING	0.0	0.0	0.0	100.0	0.0	0.0	0.0
TOTAL	54.9%	5.6%	2.8%	5.6%	1.4%	11.3%	18.3%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 32

Relationships Between Activities and Modes and Materials

	MODE					MATERIALS						
ACTIVITY	Telling	T Q/S responds	T Q/nc response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	57.1%	28.6%	0.0%	28.6%	28.6%	0.0%	14.3%	0.0%	14.3%	42.9%	0.0%	28.6%
2. GIVING INSTUCTIONS	76.5	11.8	0.0	5.9	11.8	5.9	5.9	17.6	0.0	5.9	23.5	47.1
3. ORIENTING	35.3	70.6	0.0	5.9	11.8	23.5	17.6	5.9	17.6	17.6	11.8	23.5
4. REVIEWING	23.1	69.2	0.0	23.1	7.7	7.7	0.0	0.0	15.4	0.0	30.8	46.2
5. WRITING	0.0	0.0	0.0	0.0	100.0	14.3	14.3	14.3	28.6	0.0	14.3	28.6
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0
8. EVALUATING	66.7	66.7	0.0	33.3	0.0	16.7	16.7	0.0	0.0	0.0	66.7	66.7
9. EDITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
TOTAL	43.7%	40.8%	0.0%	12.7%	23.9%	11.3%	9.9%	7.0%	11.3%	9.9%	22.5%	36.6%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentages may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 32

Relationships Between Activities and Foci of Activities

	FOCI											
ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	14.3%	14.3%	0.0%	28.6%	14.3%	14.3%	0.0%	14.3%	0.0%	14.3%	0.0%	71.4%
2. GIVING INSTUCTIONS	17.6	0.0	5.9	11.8	35.3	5.9	0.0	0.0	5.9	0.0	23.5	41.2
3. ORIENTING	5.9	0.0	0.0	29.4	0.0	0.0	11.8	0.0	0.0	0.0	23.5	52.9
4. REVIEWING	23.1	46.2	46.2	15.4	38.5	23.1	0.0	30.8	0.0	15.4	15.4	15.4
5. WRITING	14.3	28.6	14.3	14.3	28.6	14.3	0.0	28.6	0.0	14.3	0.0	57.1
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
8. EVALUATING	16.7	33.3	16.7	33.3	66.7	0.0	0.0	16.7	0.0	0.0	0.0	33.3
9. EDITING	0.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0
TOTAL	14.1%	15.5%	12.7%	21.1%	25.4%	9.9%	2.8%	12.7%	1.4%	5.6%	14.1%	45.1%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 41

Relationships Between Activities and Participants

	PARTICIPANTS						
ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1. PRESENTING	88.2%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%
2. GIVING INSTUCTIONS	89.3	0.0	0.0	7.1	0.0	0.0	3.6
3. ORIENTING	84.6	0.0	0.0	3.8	0.0	0.0	11.5
4. REVIEWING	92.3	0.0	0.0	0.0	0.0	3.8	3.8
5. WRITING	9.1	0.0	0.0	0.0	9.1	72.7	9.1
6. REWRITING	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7. SHARING OF WRITING	40.0	0.0	0.0	0.0	20.0	20.0	20.0
8. EVALUATING	11.1	0.0	0.0	66.7	0.0	0.0	22.2
9. EDITING	0.0	0.0	0.0	50.0	0.0	50.0	0.0
TOTAL	70.9%	0.0%	0.0%	7.9%	1.6%	11.0%	8.7%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 41

Relationships Between Activities and Modes and Materials

ACTIVITY	MODE					MATERIALS						
	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	23.5%	52.9%	0.0%	5.9%	17.6%	41.2%	5.9%	35.3%	11.8%	5.9%	5.9%	35.3%
2. GIVING INSTUCTIONS	64.3	14.3	0.0	21.4	3.6	7.1	0.0	0.0	10.7	0.0	14.3	67.9
3. ORIENTING	19.2	61.5	3.8	3.8	15.4	3.8	7.7	0.0	15.4	3.8	15.4	53.8
4. REVIEWING	23.1	57.7	0.0	0.0	19.2	19.2	7.7	0.0	11.5	7.7	0.0	61.5
5. WRITING	0.0	0.0	0.0	9.1	90.9	0.0	0.0	0.0	0.0	9.1	18.2	72.7
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7. SHARING OF WRITING	20.0	20.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	80.0	20.0
8. EVALUATING	22.2	11.1	0.0	11.1	66.7	0.0	0.0	0.0	0.0	0.0	55.6	44.4
9. EDITING	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0
TOTAL	28.3%	36.2%	1.6%	7.9%	28.3%	11.8%	3.9%	4.7%	9.4%	3.9%	18.9%	54.3%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 41

Relationships Between Activities and Foci of Activities

ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	0.0%	0.0%	41.2%	5.9%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	29.4%	70.0%
2. GIVING INSTUCTIONS	3.6	3.6	7.1	3.6	14.3	0.0	0.0	0.0	10.7	3.6	14.3	83.3
3. ORIENTING	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	85.7
4. REVIEWING	3.8	7.7	23.1	7.7	7.7	7.7	0.0	7.7	7.7	0.0	23.1	58.8
5. WRITING	18.2	9.1	9.1	0.0	0.0	0.0	0.0	9.1	18.2	0.0	9.1	57.1
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	100.0
7. SHARING OF WRITING	60.0	60.0	60.0	40.0	60.0	40.0	0.0	40.0	0.0	40.0	20.0	66.7
8. EVALUATING	22.2	11.1	0.0	11.1	11.1	11.1	11.1	0.0	0.0	0.0	0.0	80.0
9. EDITING	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
TOTAL	7.9%	6.3%	15.7%	5.5%	8.7%	3.9%	0.8%	3.9%	5.5%	2.4%	15.0%	75.3%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 42

Relationships Between Activities and Participants

	PARTICIPANTS						
ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1. PRESENTING	80.0%	0.0%	0.0%	10.0%	0.0%	0.0%	10.0%
2. GIVING INSTUCTIONS	70.8	0.0	0.0	0.0	0.0	4.2	15.0
3. ORIENTING	90.5	0.0	0.0	0.0	0.0	4.8	4.8
4. REVIEWING	88.2	0.0	0.0	0.0	0.0	0.0	11.8
5. WRITING	0.0	0.0	0.0	14.3	0.0	57.1	28.6
6. REWRITING	0.0	0.0	0.0	0.0	0.0	50.0	50.0
7. SHARING OF WRITING	0.0	0.0	0.0	33.3	67.7	0.0	0.0
8. EVALUATING	0.0	0.0	20.0	80.0	0.0	0.0	0.0
9. EDITING	0.0	0.0	50.0	0.0	0.0	0.0	50.0
TOTAL	63.4%	0.0%	2.2%	7.5%	2.2%	8.6%	15.1%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 42

Relationships Between Activities and Modes and Materials

	MODE					MATERIALS						
ACTIVITY	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	30.0%	40.0%	0.0%	20.0%	20.0%	20.0%	0.0%	0.0%	30.0%	10.0%	10.0%	50.0%
2. GIVING INSTUCTIONS	75.0	20.8	0.0	8.3	16.7	16.7	20.8	0.0	0.0	0.0	0.0	62.5
3. ORIENTING	4.8	81.0	4.8	0.0	9.5	0.0	14.3	0.0	23.8	0.0	4.8	61.9
4. REVIEWING	11.8	76.5	0.0	0.0	11.8	5.9	0.0	0.0	5.9	0.0	5.9	82.4
5. WRITING	0.0	14.3	0.0	14.3	85.7	0.0	0.0	0.0	0.0	14.3	14.3	71.4
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	25.0	75.0
7. SHARING OF WRITING	33.3	33.3	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0
8. EVALUATING	80.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	80.0
9. EDITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0
TOTAL	31.2%	44.1%	2.2%	6.5%	25.8%	7.5%	8.6%	0.0%	10.8%	2.2%	6.5%	67.7%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 42

Relationships Between Activities and Foci of Activities

	FOCI											
ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	10.0%	10.0%	10.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	70.0%
2. GIVING INSTUCTIONS	0.0	0.0	0.0	4.2	4.2	0.0	0.0	4.2	4.2	0.0	8.3	83.3
3. ORIENTING	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0	4.8	85.7
4. REVIEWING	17.6	17.6	23.5	29.4	23.5	11.8	5.9	17.6	17.6	5.9	11.8	58.8
5. WRITING	14.3	14.3	14.3	0.0	14.3	14.3	0.0	14.3	0.0	14.3	14.3	57.1
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	33.3	33.3	33.3	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	66.7
8. EVALUATING	20.0	20.0	20.0	20.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	80.0
9. EDITING	50.0	50.0	50.0	50.0	50.0	0.0	0.0	50.0	50.0	0.0	0.0	50.0
TOTAL	8.6%	8.6%	9.7%	10.8%	10.8%	4.3%	1.1%	6.5%	5.4%	2.2%	8.6%	75.3%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 51

Relationships Between Activities and Participants

	PARTICIPANTS						
ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1. PRESENTING	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2. GIVING INSTUCTIONS	7.0	72.1	4.7	4.7	0.0	0.0	11.6
3. ORIENTING	0.0	88.9	5.6	0.0	0.0	5.6	0.0
4. REVIEWING	14.8	48.1	18.5	11.1	0.0	0.0	7.4
5. WRITING	0.0	31.3	6.3	6.3	6.3	43.8	6.3
6. REWRITING	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7. SHARING OF WRITING	0.0	62.5	12.5	12.5	0.0	0.0	12.5
8. EVALUATING	3.1	21.9	25.0	31.3	0.0	0.0	18.8
9. EDITING	0.0	25.0	25.0	12.5	12.5	0.0	25.0
TOTAL	5.1%	52.6%	12.8%	11.5%	1.3%	5.8%	10.9%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 51

Relationships Between Activities and Modes and Materials

ACTIVITY	MODE					MATERIALS						
	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	66.7%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	66.7%	0.0%	0.0%
2. GIVING INSTUCTIONS	83.7	25.6	2.3	0.0	7.0	20.9	16.3	4.7	0.0	2.3	0.0	55.8
3. ORIENTING	27.8	61.1	5.6	0.0	16.7	44.4	16.7	0.0	0.0	5.6	5.6	27.8
4. REVIEWING	29.6	63.0	7.4	3.7	11.1	11.1	7.4	11.1	3.7	0.0	3.7	63.0
5. WRITING	6.3	18.8	0.0	6.3	68.8	12.5	12.5	6.3	6.3	0.0	12.5	56.3
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
7. SHARING OF WRITING	25.0	37.5	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	75.0	25.0
8. EVALUATING	37.5	40.6	0.0	0.0	40.6	0.0	0.0	0.0	0.0	0.0	53.1	46.9
9. EDITING	25.0	12.5	0.0	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	100.0
TOTAL	43.6%	39.7%	2.6%	1.3%	26.9%	16.0%	9.0%	3.8%	1.3%	2.6%	17.9%	51.3%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 51

Relationships Between Activities and Foci of Activities

		FOCI											
ACTIVITY		Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1.	PRESENTING	33.3%	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2.	GIVING INSTUCTIONS	11.6	4.7	2.3	16.3	16.3	0.0	0.0	4.7	4.7	2.3	0.0	53.5
3.	ORIENTING	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	16.7	0.0	0.0	66.7
4.	REVIEWING	14.8	3.7	11.1	33.3	0.0	7.4	0.0	7.4	3.7	7.4	0.0	33.3
5.	WRITING	18.8	6.3	18.8	12.5	6.3	31.3	0.0	31.3	0.0	12.5	0.0	50.0
6.	REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
7.	SHARING OF WRITING	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	25.0	12.5	0.0	62.5
8.	EVALUATING	40.6	15.6	37.5	40.6	9.4	18.8	3.1	21.9	12.5	9.4	0.0	12.5
9.	EDITING	50.0	0.0	25.0	0.0	0.0	25.0	0.0	12.5	25.0	12.5	0.0	25.0
	TOTAL	19.2%	5.8%	13.5%	24.4%	7.1%	10.3%	0.6%	11.5%	9.0%	6.4%	0.0%	40.4%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 52

Relationships Between Activities and Participants

	PARTICIPANTS						
ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1. PRESENTING	75.0%	12.5%	0.0%	0.0%	0.0%	0.0%	12.5%
2. GIVING INSTUCTIONS	37.9	34.1	3.4	6.9	0.0	3.4	24.1
3. ORIENTING	66.7	27.8	0.0	0.0	0.0	0.0	5.6
4. REVIEWING	27.6	41.4	10.3	6.9	3.4	0.0	10.3
5. WRITING	0.0	0.0	10.0	0.0	0.0	50.0	40.0
6. REWRITING	0.0	0.0	0.0	0.0	0.0	33.3	66.7
7. SHARING OF WRITING	0.0	20.0	0.0	0.0	60.0	0.0	20.0
8. EVALUATING	5.6	11.1	16.7	33.3	0.0	0.0	33.3
9. EDITING	0.0	0.0	70.0	0.0	10.0	0.0	20.0
TOTAL	29.2%	21.5%	11.5%	7.7%	3.8%	5.4%	20.8%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 52

Relationships Between Activities and Modes and Materials

	MODE					MATERIALS						
ACTIVITY	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	75.0%	12.5%	0.0%	0.0%	12.5%	62.5%	12.5%	0.0%	0.0%	50.0%	0.0%	0.0%
2. GIVING INSTUCTIONS	69.0	10.3	0.0	6.9	20.7	0.0	10.3	3.4	0.0	20.7	13.8	55.2
3. ORIENTING	16.7	72.2	0.0	0.0	11.1	0.0	5.6	0.0	27.8	27.8	0.0	38.9
4. REVIEWING	34.5	44.8	0.0	0.0	24.1	3.4	6.9	0.0	6.9	13.8	34.5	34.5
5. WRITING	0.0	10.0	0.0	10.0	80.0	0.0	10.0	0.0	10.0	0.0	50.0	40.0
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	40.0	60.0
8. EVALUATING	44.4	27.8	0.0	16.7	44.4	0.0	0.0	0.0	0.0	16.7	66.7	22.2
9. EDITING	40.0	60.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	10.0	90.0
TOTAL	39.2%	32.3%	0.0%	4.6%	33.1%	4.6%	6.2%	0.8%	6.2%	16.9%	26.2%	43.1%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 52

Relationships Between Activities and Foci of Activities

ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	0.0%	0.0%	0.0%	0.0%	37.5%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%
2. GIVING INSTUCTIONS	10.3	6.9	10.3	6.9	10.3	10.3	3.4	0.0	10.3	13.8	0.0	65.6
3. ORIENTING	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	88.9
4. REVIEWING	6.9	6.9	13.8	3.4	17.2	10.3	3.4	6.9	3.4	17.2	10.3	51.7
5. WRITING	40.0	40.0	40.0	40.0	30.0	30.0	0.0	20.0	20.0	20.0	10.0	30.0
6. REWRITING	0.0	0.0	33.3	0.0	33.3	33.3	0.0	0.0	33.3	33.3	0.0	66.7
7. SHARING OF WRITING	20.0	20.0	0.0	40.0	20.0	20.0	0.0	20.0	20.0	20.0	0.0	60.0
8. EVALUATING	0.0	5.6	33.3	16.7	11.1	11.1	0.0	5.6	5.6	22.2	11.1	44.4
9. EDITING	20.0	10.0	20.0	10.0	0.0	70.0	0.0	10.0	0.0	20.0	0.0	20.0
TOTAL	9.2%	8.5%	15.4%	10.0%	15.4%	15.4%	1.5%	5.4%	6.9%	14.6%	7.7%	55.4%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 61

Relationships Between Activities and Participants

	PARTICIPANTS						
ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
1. PRESENTING	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%
2. GIVING INSTUCTIONS	44.8	41.4	0.0	0.0	0.0	0.0	13.8
3. ORIENTING	39.1	39.1	0.0	0.0	0.0	4.3	17.4
4. REVIEWING	37.1	42.9	8.6	2.9	0.0	0.0	8.6
5. WRITING	15.4	0.0	0.0	0.0	7.7	53.8	23.1
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. SHARING OF WRITING	5.6	61.1	0.0	16.7	0.0	0.0	16.7
8. EVALUATING	7.7	38.5	0.0	38.5	0.0	0.0	15.4
9. EDITING	0.0	50.0	0.0	0.0	0.0	50.0	0.0
TOTAL	30.7%	38.6%	2.1%	6.4%	0.7%	7.1%	14.3%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 61

Relationships Between Activities and Modes and Materials

	MODE					MATERIALS						
ACTIVITY	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	80.0%	20.0%	0.0%	20.0%	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%	20.0%	40.0%
2. GIVING INSTUCTIONS	75.9	13.8	6.9	6.9	10.3	6.9	0.0	3.4	31.0	0.0	27.6	31.0
3. ORIENTING	21.7	56.5	0.0	0.0	30.4	13.0	4.3	4.3	34.8	4.3	13.0	39.1
4. REVIEWING	45.7	71.4	0.0	2.9	2.9	10.0	0.0	2.9	5.7	0.0	45.7	31.4
5. WRITING	23.1	7.7	0.0	0.0	69.2	0.0	0.0	0.0	30.8	0.0	7.7	61.5
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	22.2	33.3	0.0	22.2	38.9	0.0	0.0	0.0	11.1	0.0	72.2	16.7
8. EVALUATING	23.1	61.5	0.0	0.0	23.1	0.0	0.0	0.0	23.1	15.4	76.9	0.0
9. EDITING	0.0	25.0	0.0	0.0	75.0	0.0	0.0	0.0	25.0	0.0	75.0	0.0
TOTAL	40.7%	42.1%	1.4%	5.7%	23.6%	9.3%	0.7%	2.1%	21.4%	2.1%	39.3%	30.0%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 61

Relationships Between Activities and Foci of Activities

ACTIVITY	Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	40.0%
2. GIVING INSTUCTIONS	3.4	3.4	0.0	6.9	3.4	6.9	6.9	6.9	6.9	13.8	10.3	55.2
3. ORIENTING	0.0	0.0	0.0	0.0	0.0	4.3	4.3	8.7	4.3	8.7	4.3	69.6
4. REVIEWING	8.6	8.6	11.4	5.7	8.6	5.7	11.4	11.4	14.3	0.0	8.6	37.1
5. WRITING	15.4	7.7	7.7	7.7	7.7	0.0	7.7	0.0	7.7	0.7	0.0	76.9
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	0.0	0.0	5.6	16.7	5.6	5.6	0.0	33.3	5.6	0.0	5.6	38.9
8. EVALUATING	30.8	7.7	7.7	23.1	7.7	7.7	15.4	7.7	15.4	0.0	15.4	30.8
9. EDITING	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
TOTAL	7.1%	4.3%	5.0%	10.0%	5.0%	5.0%	7.1%	10.7%	8.6%	5.7%	7.9%	50.0%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

Teacher 62

Relationships Between Activities and Participants

ACTIVITY	T with whole class	T with group of SS	T with S	T with S (serial)	Group of SS (without T)	SS working singly	NONE
	PARTICIPANTS						
1. PRESENTING	75.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%
2. GIVING INSTUCTIONS	89.5	0.0	0.0	0.0	0.0	0.0	10.5
3. ORIENTING	85.7	0.0	0.0	0.0	0.0	0.0	14.3
4. REVIEWING	94.4	0.0	5.6	0.0	0.0	0.0	0.0
5. WRITING	14.3	0.0	0.0	14.3	14.3	57.1	0.0
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. SHARING OF WRITING	100.0	0.0	0.0	0.0	0.0	0.0	0.0
8. EVALUATING	28.6	0.0	19.0	23.8	9.5	4.8	14.3
9. EDITING	62.5	12.5	0.0	0.0	12.5	12.5	0.0
TOTAL	67.4%	1.1%	5.4%	6.5%	4.3%	6.5%	8.7%

(Figures represent the percentage of occasions in which each activity used each participant grouping.)

Teacher 62

Relationships Between Activities and Modes and Materials

	MODE					MATERIALS						
ACTIVITY	Telling	T Q/S responds	T Q/no response	S Q/T responds	NONE	Audiovisual	Directive (Commercial)	Directive (T-made)	Common experience	Reading material	Students' own writing	NONE
1. PRESENTING	62.5%	37.5%	0.0%	12.5%	12.5%	12.5%	62.5%	12.5%	0.0%	0.0%	0.0%	12.5%
2. GIVING INSTUCTIONS	89.5	5.3	0.0	0.0	5.3	0.0	26.3	21.1	5.3	0.0	15.8	42.1
3. ORIENTING	28.6	57.1	0.0	0.0	14.3	0.0	0.0	42.9	14.3	0.0	14.3	42.9
4. REVIEWING	38.9	61.1	0.0	0.0	5.6	11.1	22.2	33.3	11.1	5.6	11.1	16.7
5. WRITING	14.3	0.0	0.0	0.0	85.7	0.0	28.6	14.3	14.3	0.0	28.6	14.3
6. REWRITING	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
8. EVALUATING	33.3	23.8	0.0	14.3	38.1	0.0	28.6	9.5	4.8	0.0	42.9	14.3
9. EDITING	25.0	50.0	0.0	0.0	37.5	0.0	0.0	50.0	0.0	0.0	50.0	0.0
TOTAL	46.7%	30.4%	0.0%	4.3%	25.0%	3.3 %	23.9%	22.8%	6.5%	1.1%	27.2%	20.7%

(Figures represent the percentage of occurrences of each activity which used each mode and material. Percentage may not sum to 100% for each activity because some activities used more than one mode or material.)

Teacher 62

Relationships Between Activities and Foci of Activities

ACTIVITY	FOCI Spelling	Capitalization	Punctuation	Word usage	Format/Penmanship	Sentence syntax	Outlining	Paragraph	Paragraph sequence	Purpose/Audience	Form	NONE
1. PRESENTING	0.0%	12.5%	0.0%	37.5%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	25.0%	25.0%
2. GIVING INSTUCTIONS	0.0	5.3	5.3	5.3	0.0	5.3	5.3	5.3	5.3	0.0	15.8	57.9
3. ORIENTING	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	71.4
4. REVIEWING	11.1	5.6	38.9	0.0	11.1	22.2	0.0	5.6	0.0	0.0	11.1	22.2
5. WRITING	0.0	0.0	14.3	14.3	0.0	14.3	14.3	42.9	28.6	0.0	14.3	0.0
6. REWRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7. SHARING OF WRITING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0
8. EVALUATING	33.3	23.8	23.8	33.3	14.3	19.0	0.0	14.3	14.3	9.5	14.3	23.8
9. EDITING	12.5	25.0	75.0	12.5	0.0	37.5	0.0	12.5	12.5	25.0	25.0	0.0
TOTAL	10.9%	10.9%	22.8%	14.1%	5.4%	14.1%	2.2%	10.9%	7.6%	4.3%	17.4%	31.5%

(Figures represent the percentage of occurrences of each activity which addressed each focus. Percentages may not sum to 100% for each activity because activities often had more than one focus.)

APPENDIX K

Developmental Profile Scores of Writing, Grades Three through Six

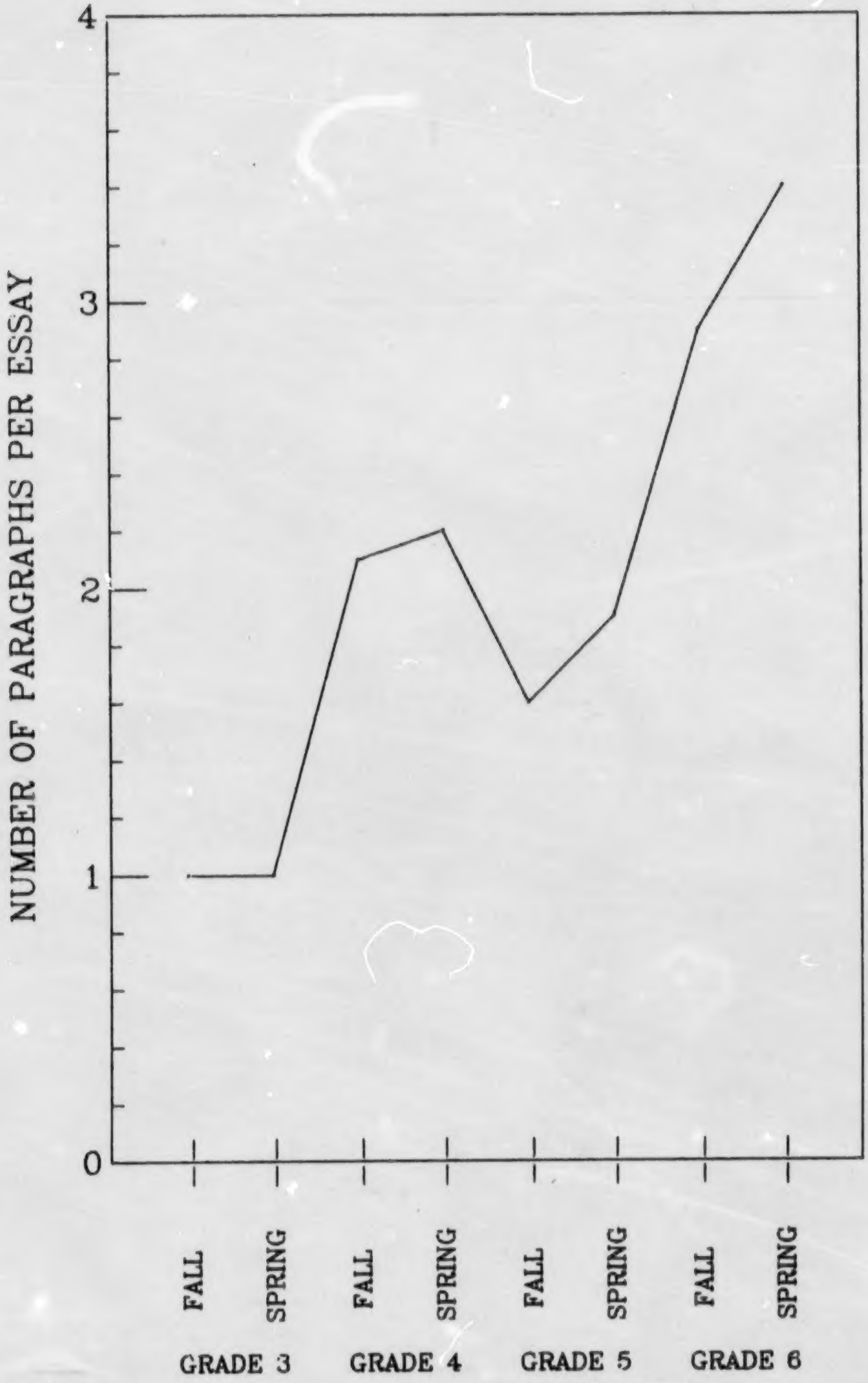
Means and Standard Deviations of Profile Scores, by Grade

	Grade 3	Grade 4	Grade 5	Grade 6	Unit
Number of paragraphs	1.007 (.022)	2.202 (1.172)	2.009 (.750)	3.353 (.750)	per essay
Number of sentences	4.453 (1.049)	9.862 (4.287)	8.041 (2.593)	12.473 (3.350)	" "
Number of words	40.885 (13.330)	126.737 (49.031)	96.766 (30.763)	149.726 (31.578)	" "
Organizing idea	.606 (.169)	.446 (.270)	.329 (.177)	.255 (.148)	errors per paragraph
Evidence	.045 (.069)	.033 (.050)	.046 (.065)	.040 (.033)	" " "
One-sentence paragraph	.015 (.047)	.089 (.130)	.097 (.085)	.091 (.082)	" " "
Forecast	.005 (.021)	.187 (.191)	.110 (.097)	.271 (.134)	errors per paragraph
Sequence	.0 (.0)	.184 (.196)	.133 (.180)	.136 (.093)	errors per paragraph link
Conclusion	.018 (.039)	.242 (.196)	.257 (.154)	.306 (.179)	errors per essay

	Grade 3	Grade 4	Grade 5	Grade 6	Unit
Fragment	.054 (.029)	.031 (.034)	.028 (.028)	.020 (.016)	errors per sentence
Subject-verb	.024 (.029)	.031 (.025)	.016 (.024)	.006 (.007)	" "
Verb	.119 (.069)	.091 (.080)	.091 (.073)	.058 (.035)	" "
Complement	.005 (.011)	.005 (.007)	.012 (.012)	.010 (.010)	" "
Compounding	.042 (.044)	.053 (.055)	.036 (.030)	.041 (.025)	" "
Word choice	.237 (.134	.229 (.150)	.209 (.117)	.147 (.071)	" "
Diction	.198 (.103)	.147 (.111)	.131 (.076)	.111 (.064)	" "
Joining	.368 (.374)	.440 (.368)	.340 (.247)	.156 (.104)	" "
Phrases and Dependent Clauses: Punctuation	1.080 (.080)	.195 (.089)	.211 (.086)	.158 (.019)	" "
Phrases and Dependent Clauses: Function	.007 (.014)	.021 (.024)	.022 (.021)	.023 (.019)	" "
Referent	.094 (.057)	.121 (.063)	.093 (.052)	.097 (.048)	" "
Terminal punctuation	.141 (.134)	.095 (.126)	.078 (.067)	.030 (.029)	" "
Quotation marks	.121 (.131)	.218 (.258)	.406 (.333)	.223 (.300)	errors per essay
Spelling	.147 (.056)	.059 (.071)	.056 (.031)	.032 (.023)	errors per word

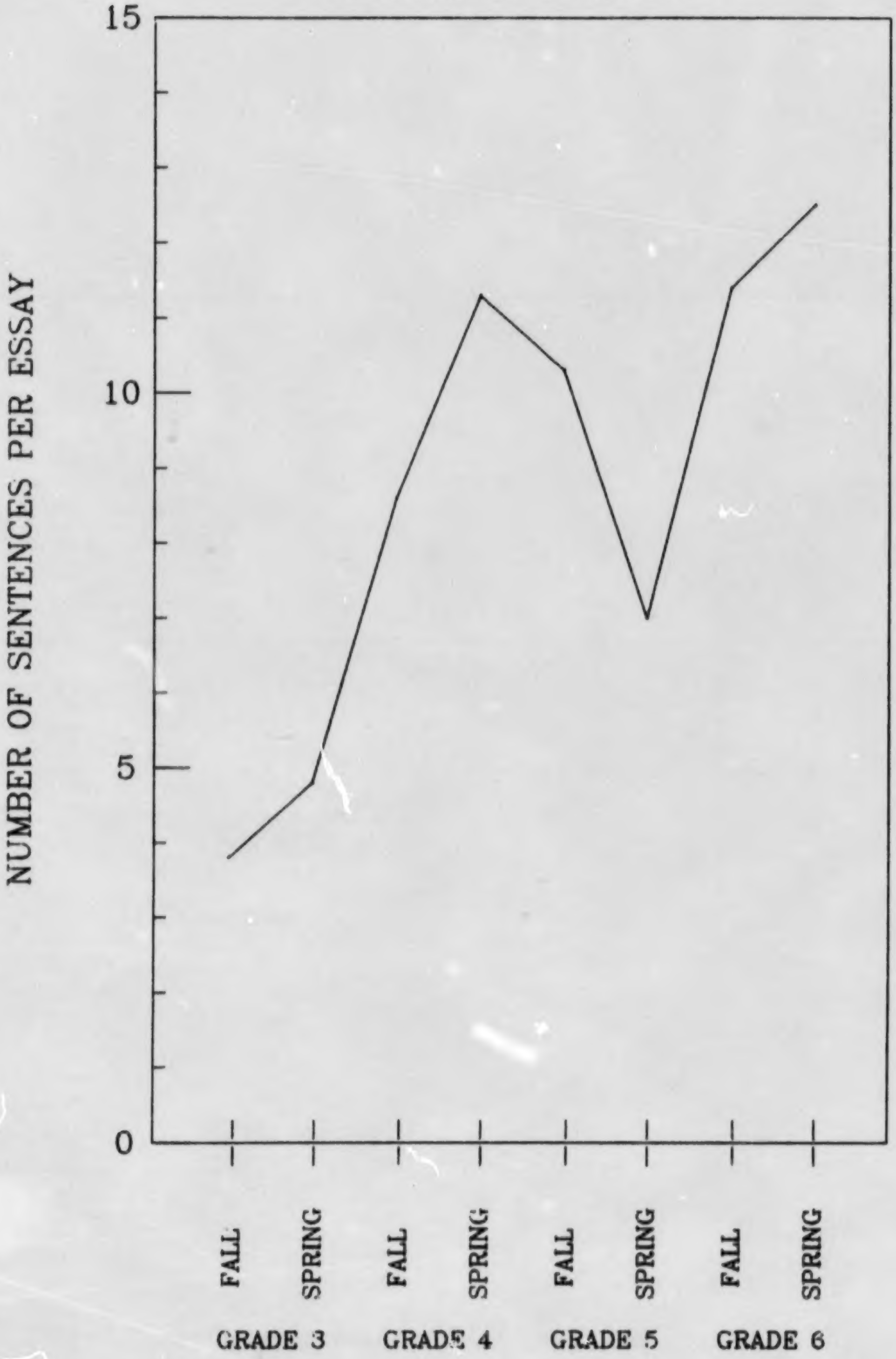
DEVELOPMENTAL PROFILE SCORE

Number of Paragraphs



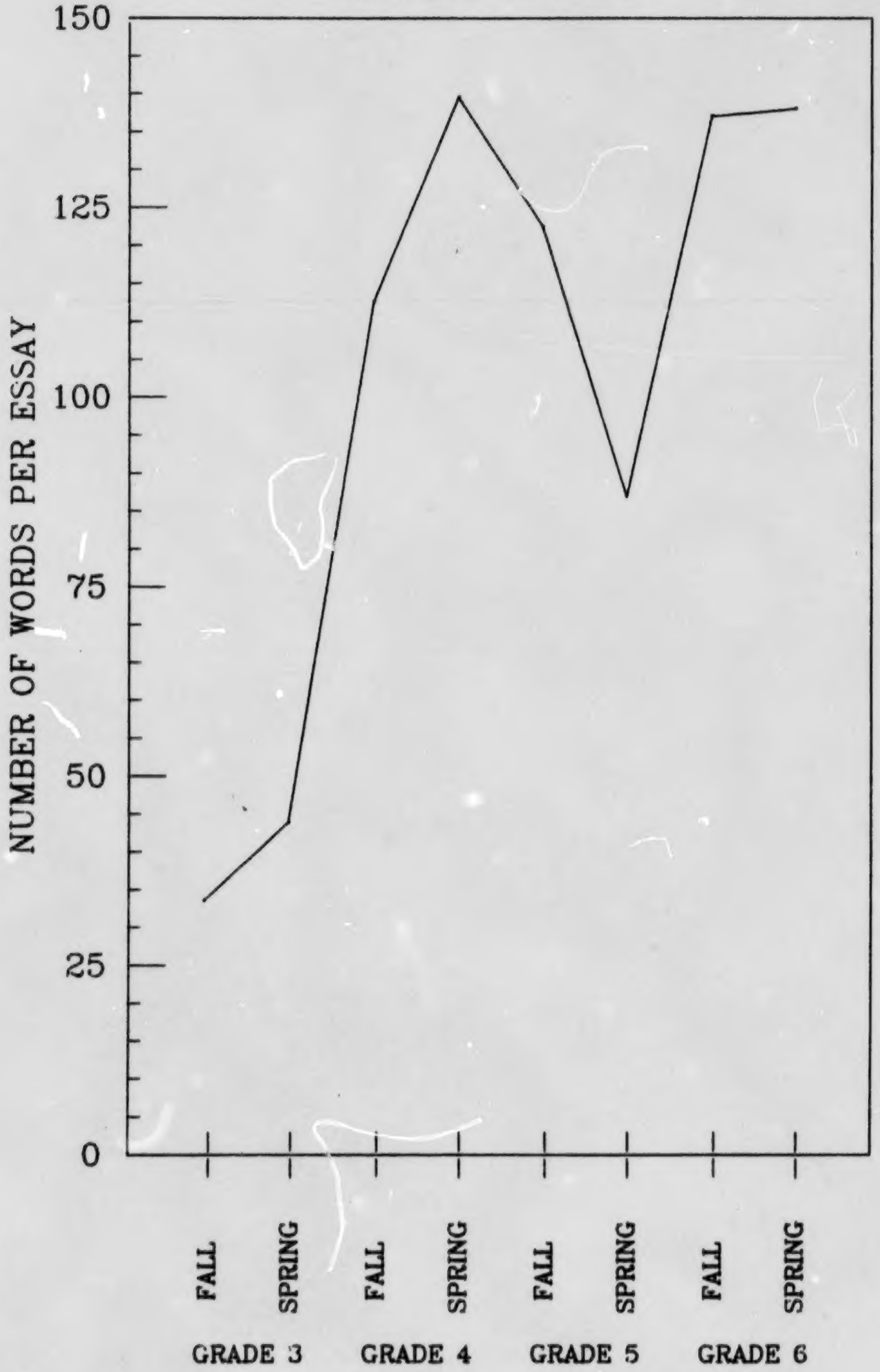
DEVELOPMENTAL PROFILE SCORE

Number of Sentences



DEVELOPMENTAL PROFILE SCORE

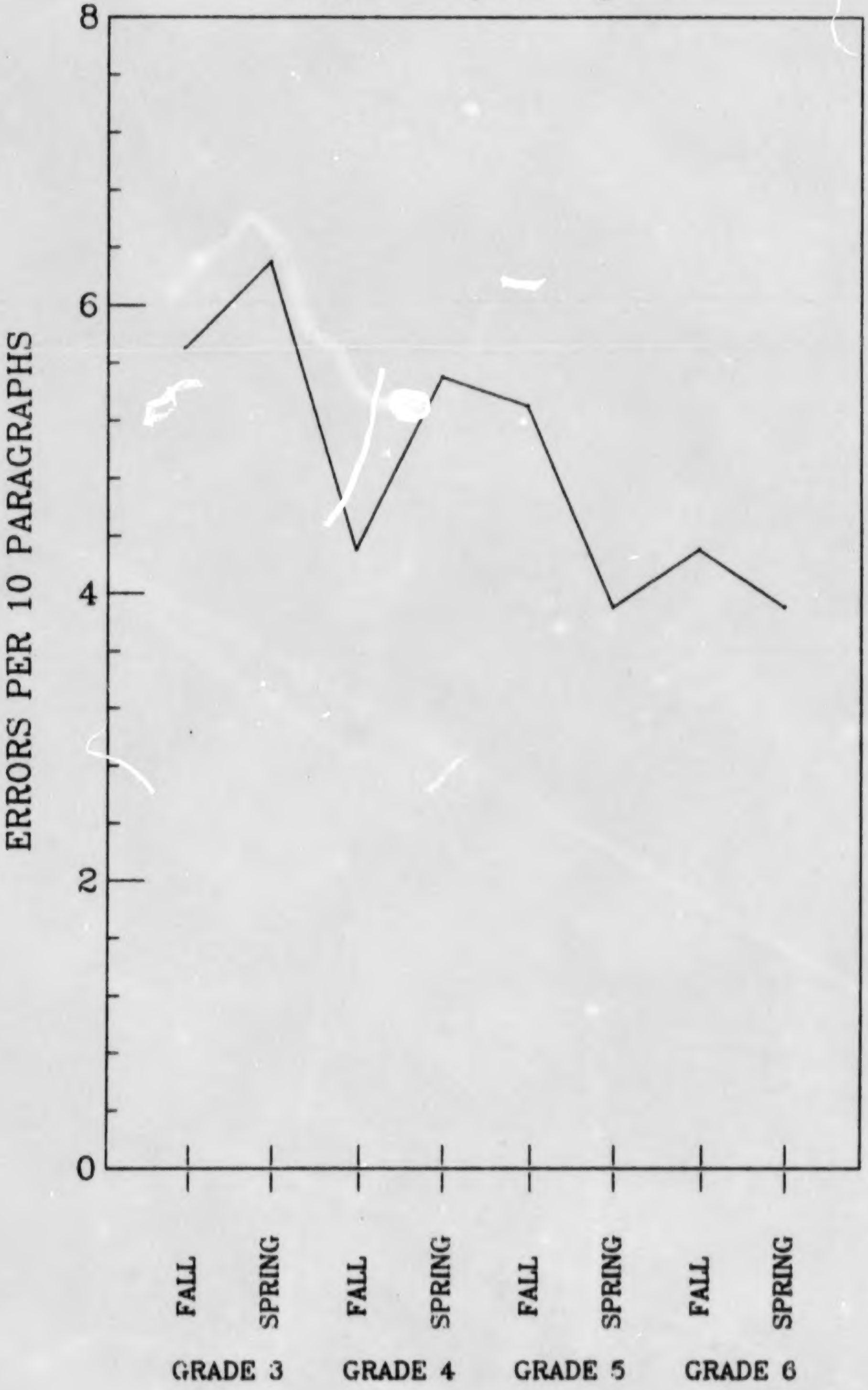
Number of Words



A130

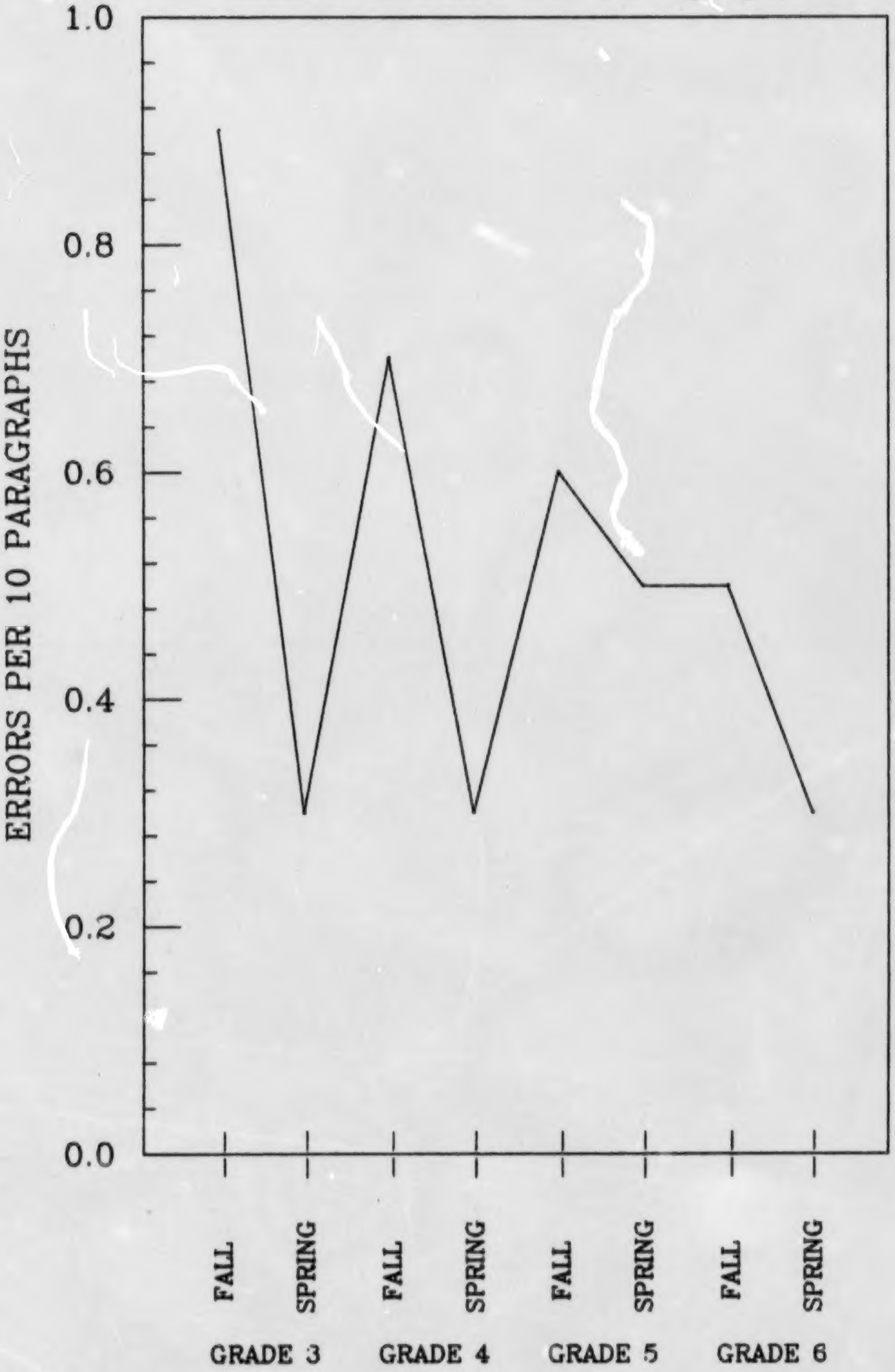
DEVELOPMENTAL PROFILE SCORE

Lack of Organizing Idea



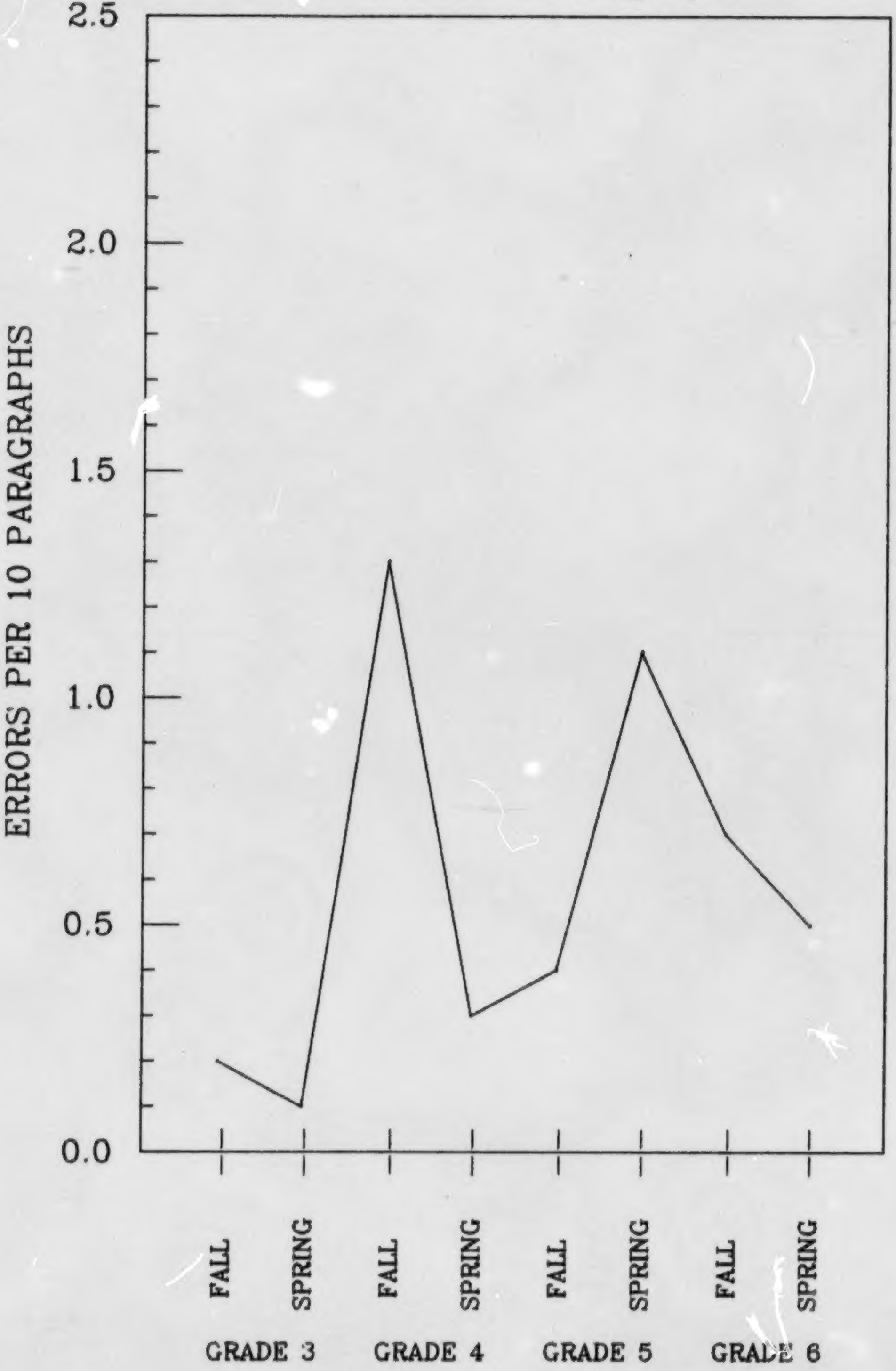
DEVELOPMENTAL PROFILE SCORE

Lack of Evidence in Paragraph



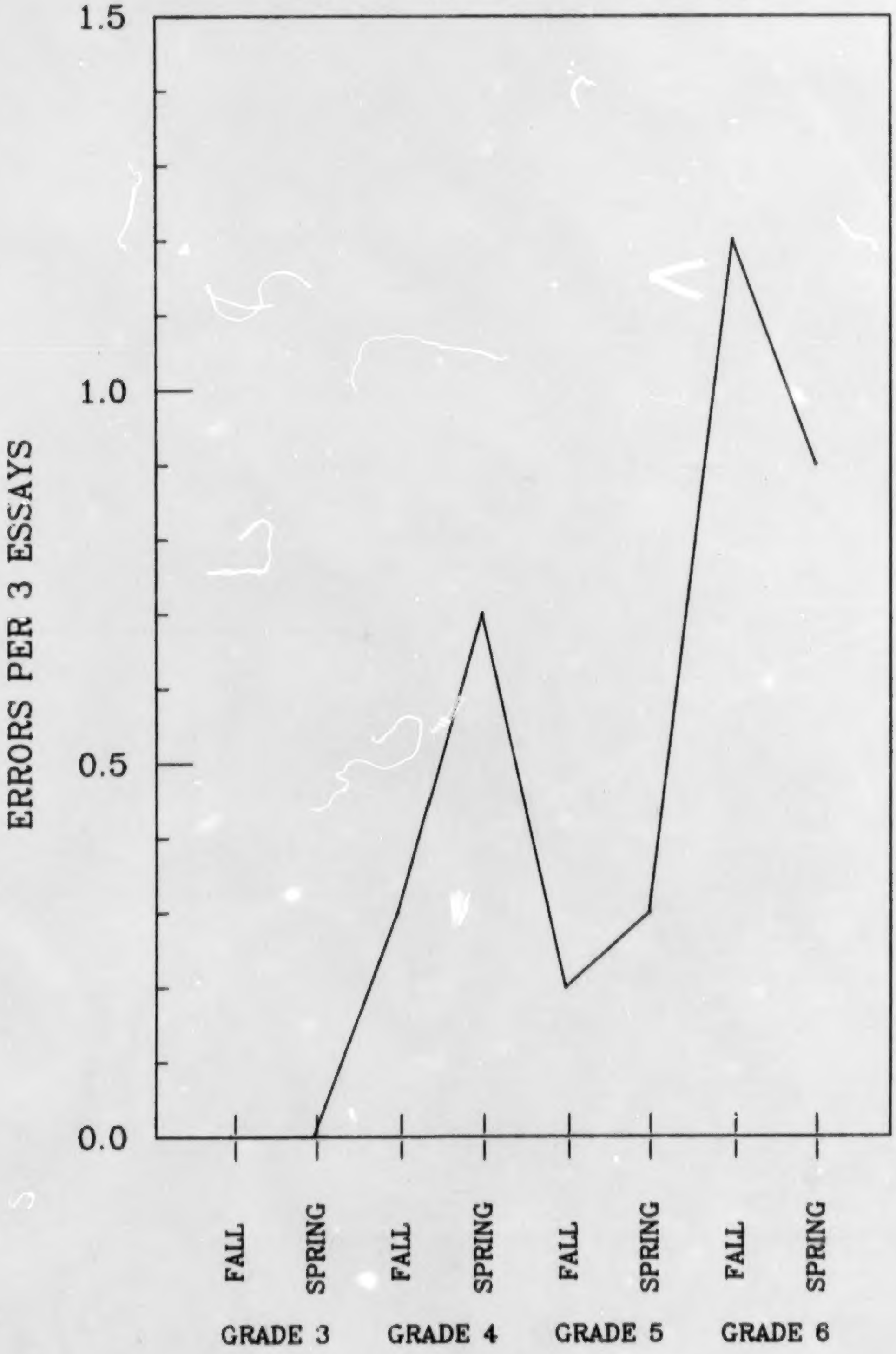
DEVELOPMENTAL PROFILE SCORE

One Sentence Paragraphs



DEVELOPMENTAL PROFILE SCORE

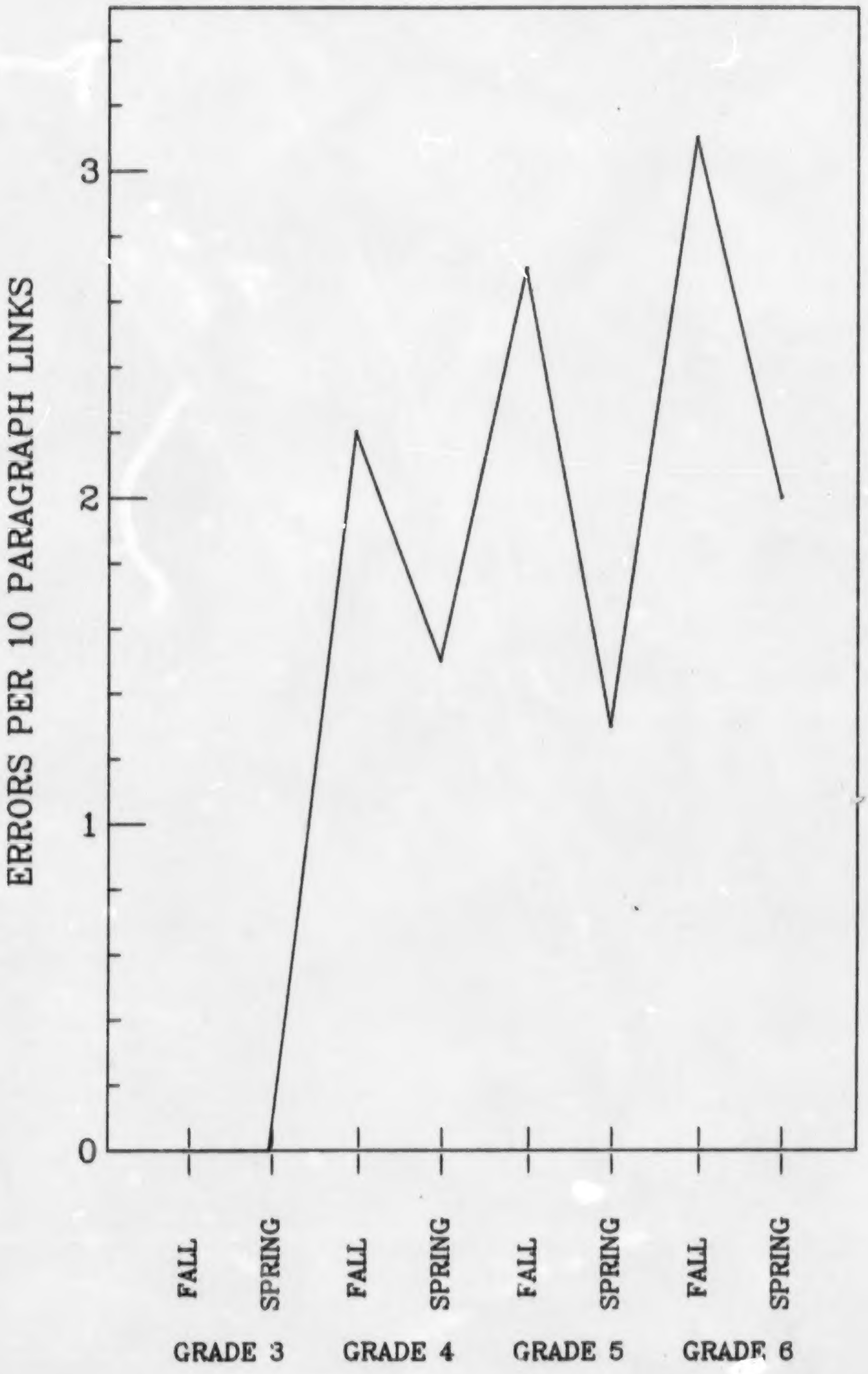
Lack of Forecast of Main Idea



A134

DEVELOPMENTAL PROFILE SCORE

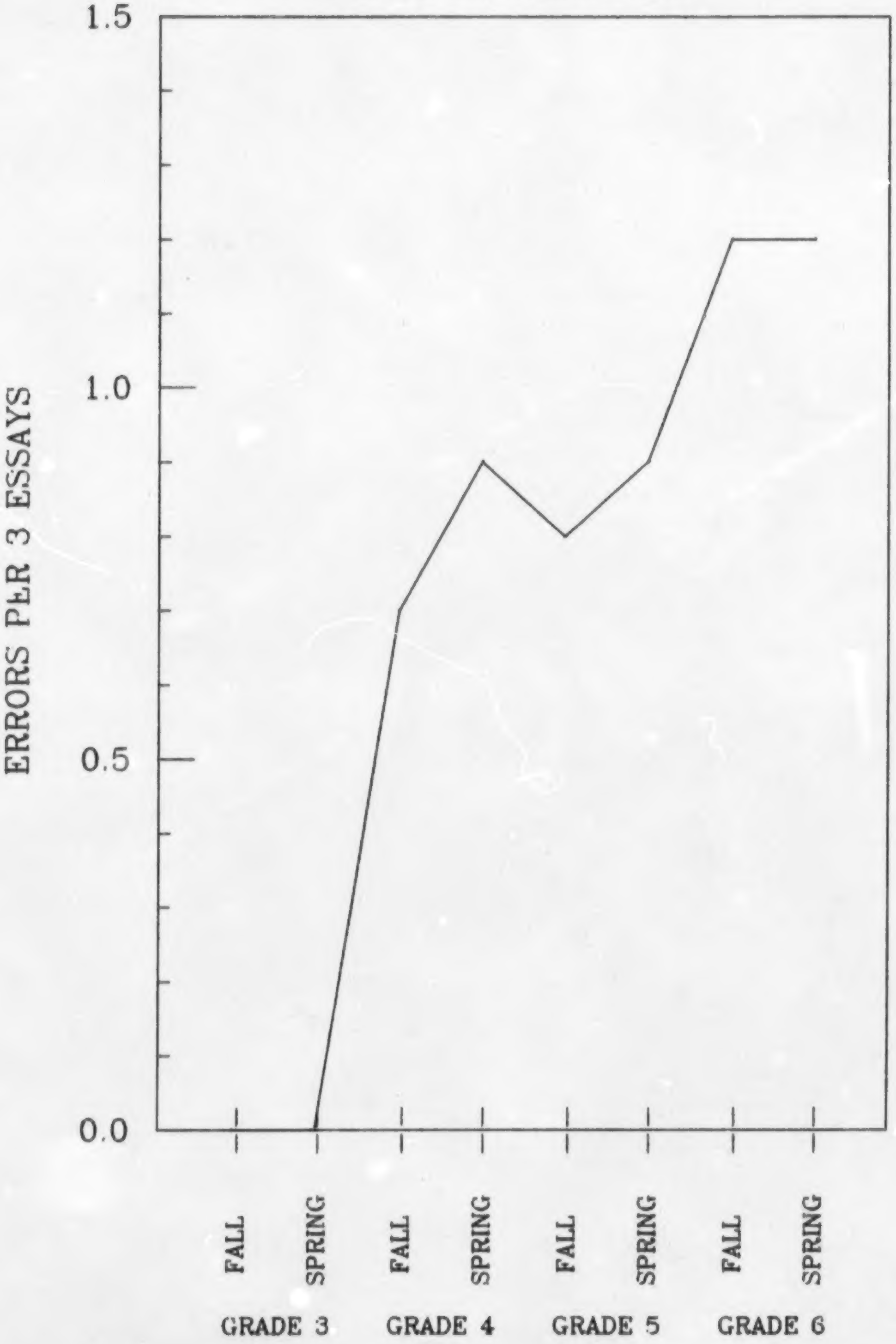
Lack of Sequence Between Paragraphs



A135

DEVELOPMENTAL PROFILE SCORE

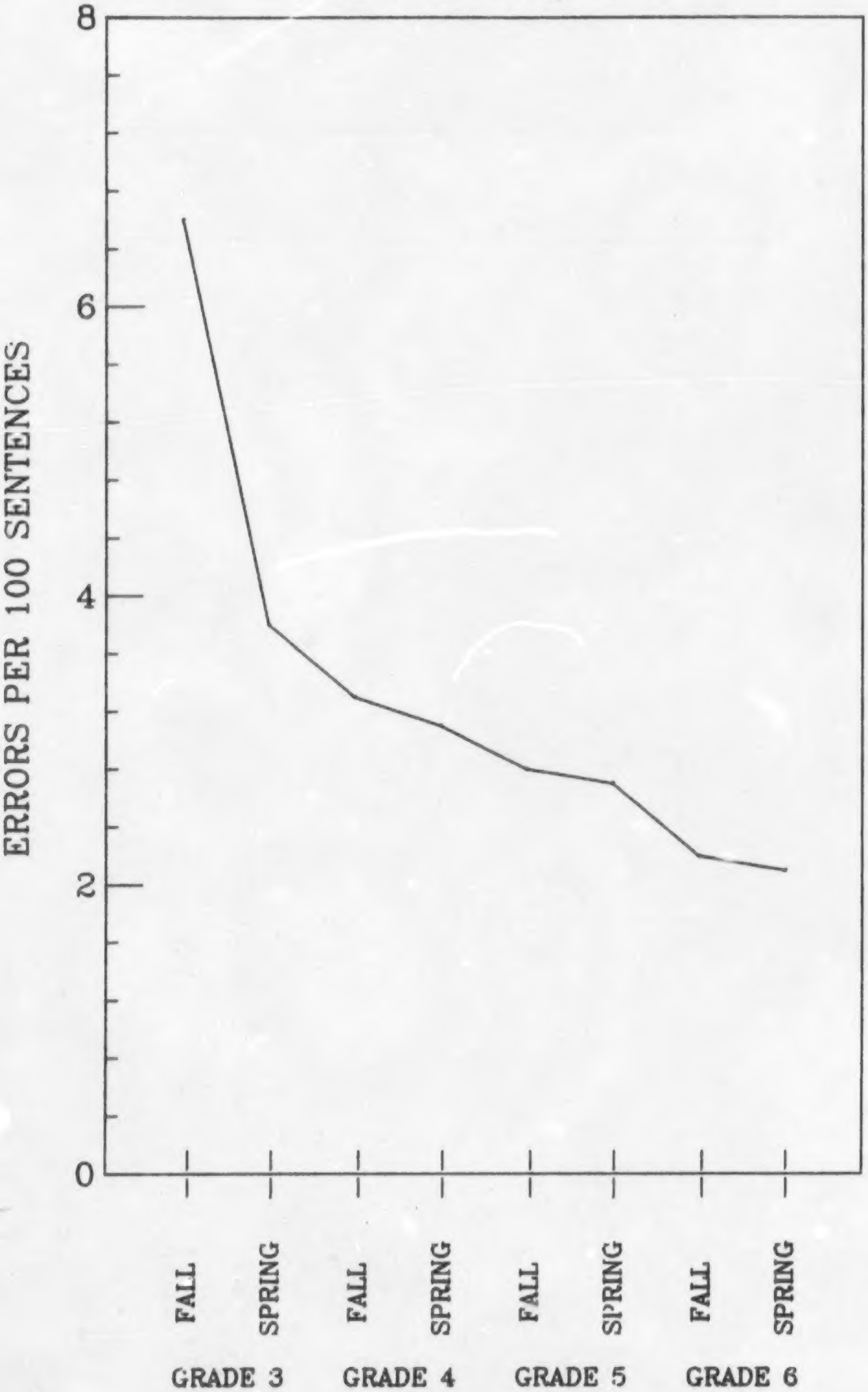
Lack of Conclusion



A136

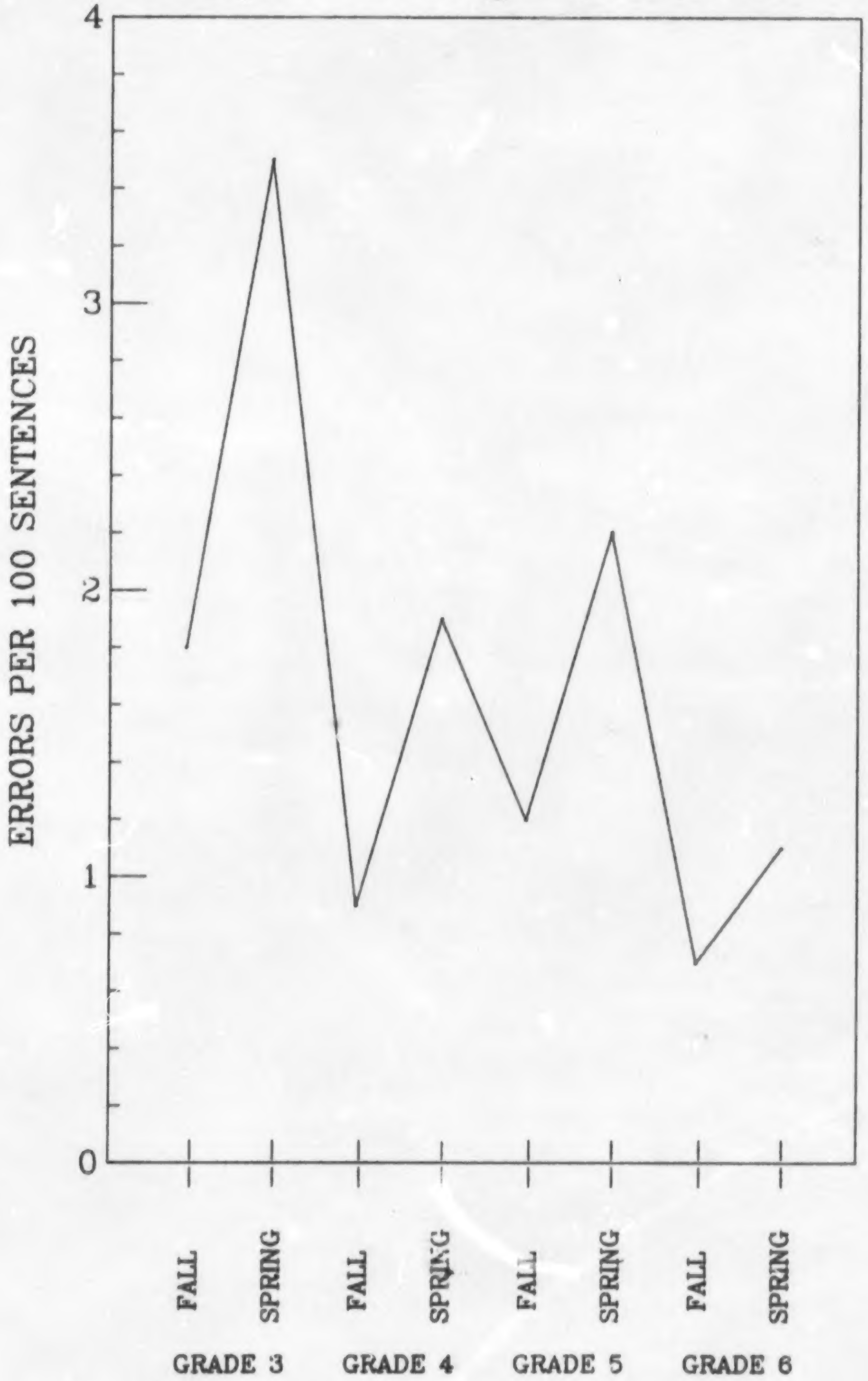
DEVELOPMENTAL PROFILE SCORE

Sentence Fragments



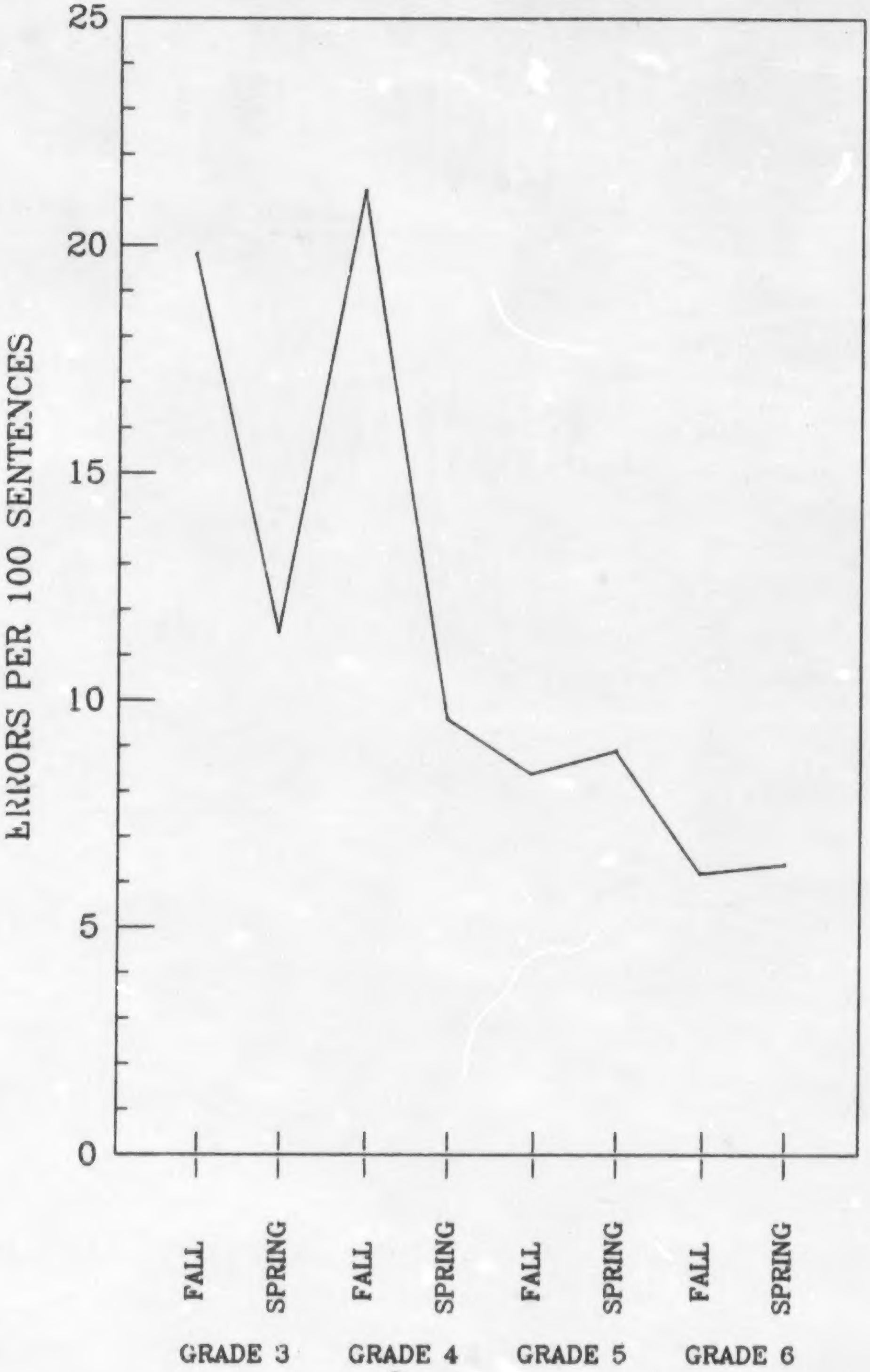
DEVELOPMENTAL PROFILE SCORE

Subject - Verb Agreement Errors



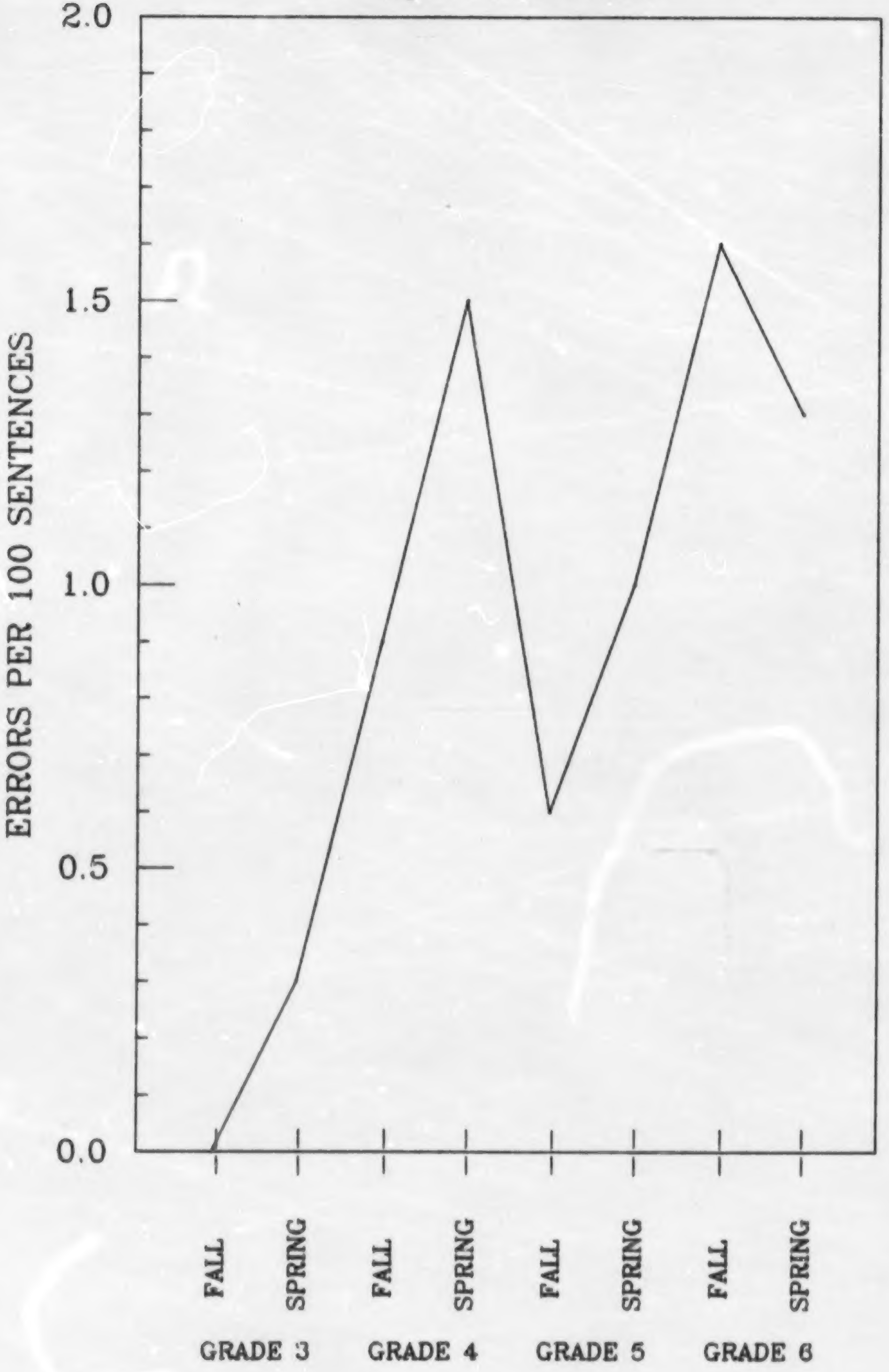
DEVELOPMENTAL PROFILE SCORE

Verb Form Errors



DEVELOPMENTAL PROFILE SCORE

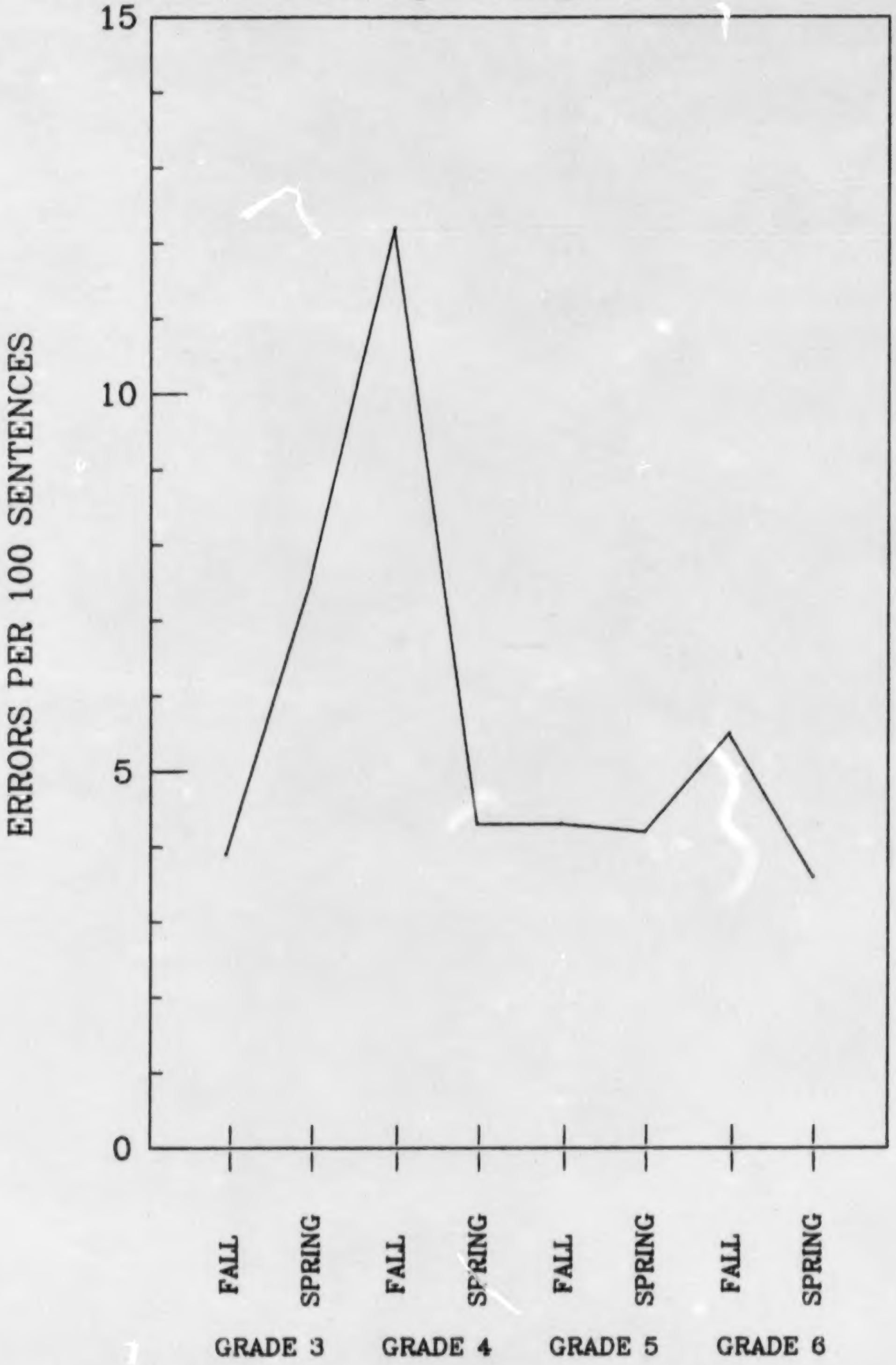
Complement Errors



A140

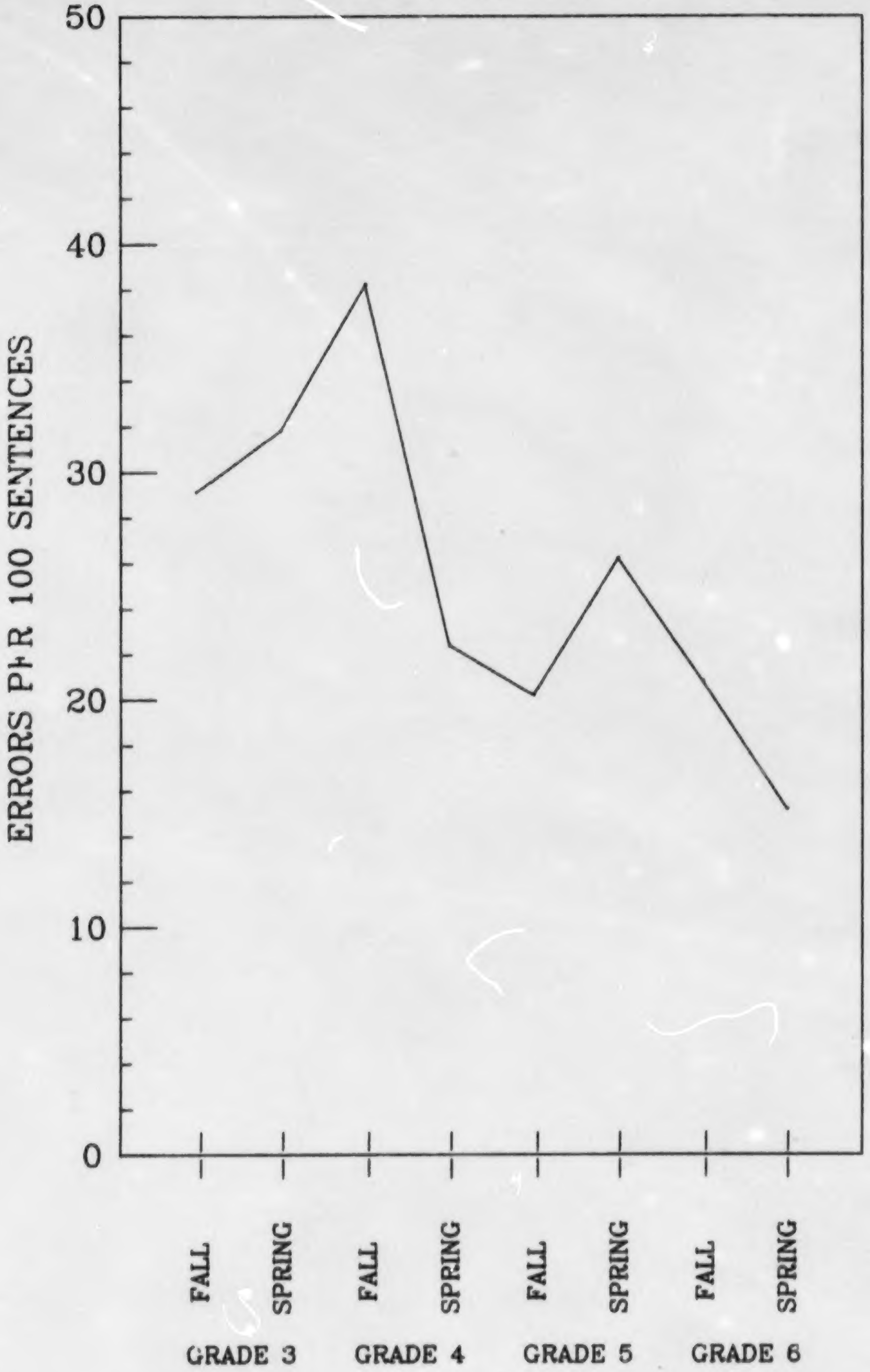
DEVELOPMENTAL PROFILE SCORE

Compounding Errors



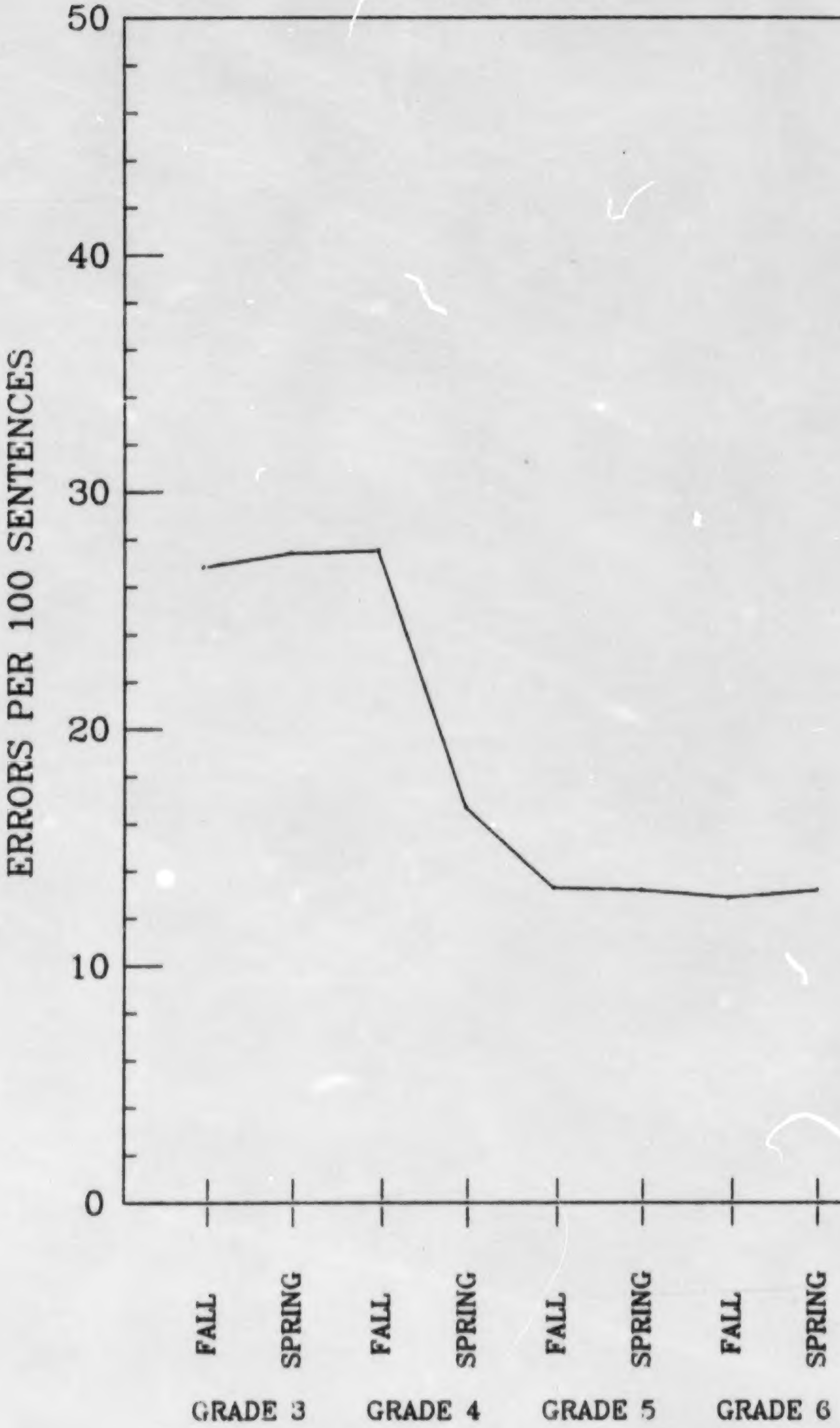
DEVELOPMENTAL PROFILE SCORE

Word Choice Errors



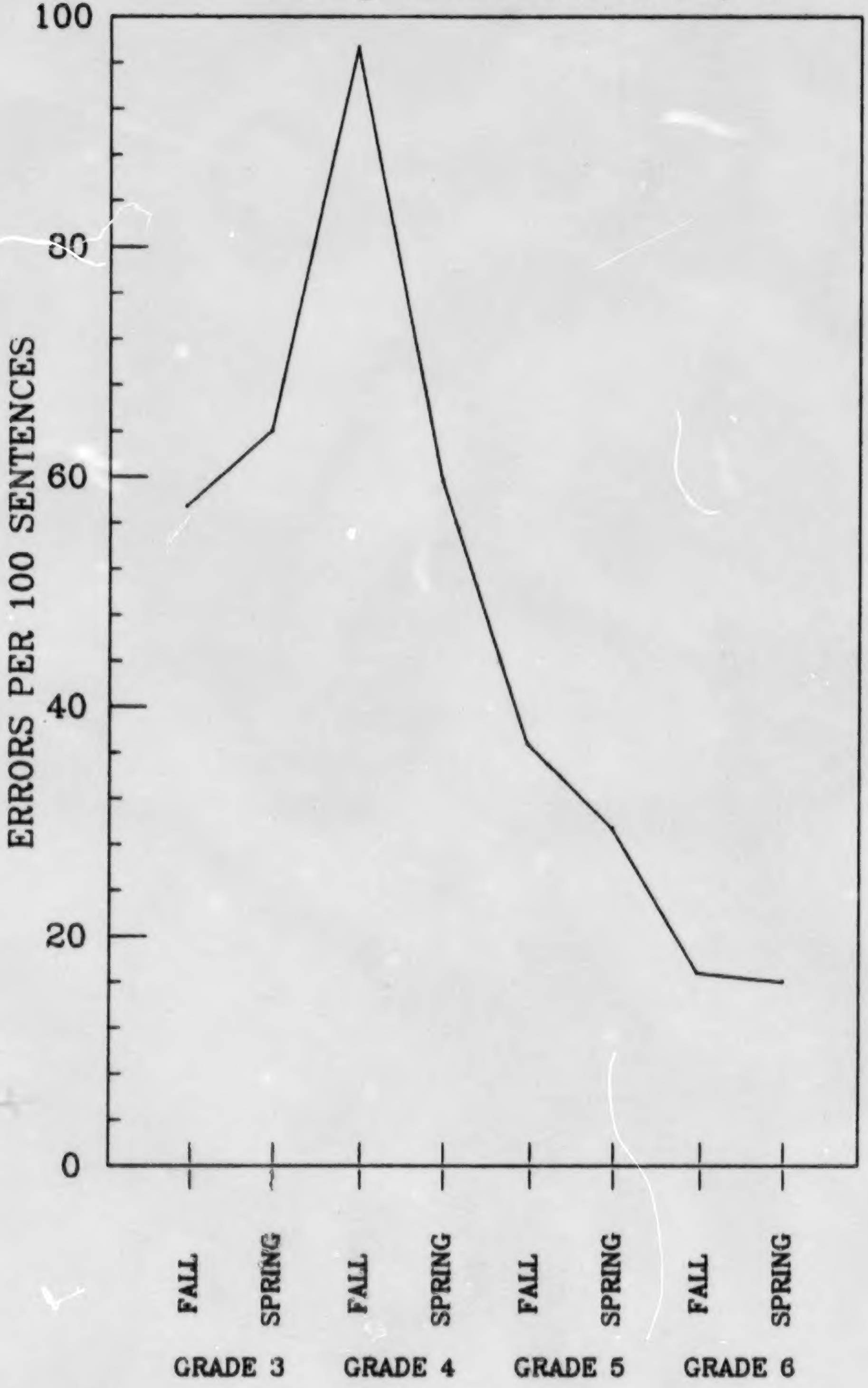
DEVELOPMENTAL PROFILE SCORE

Diction Errors



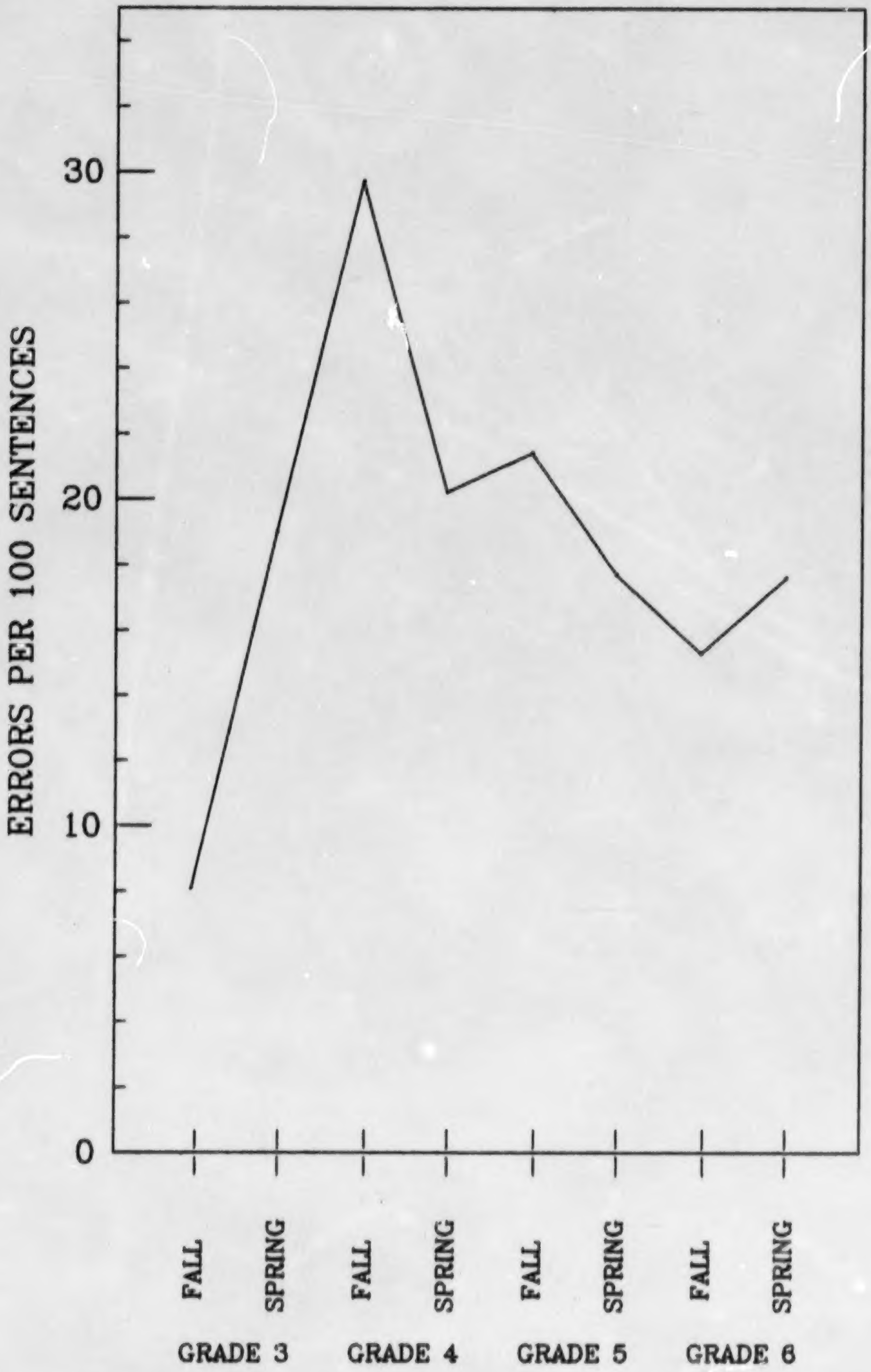
DEVELOPMENTAL PROFILE SCORE

Joining Clauses Incorrectly



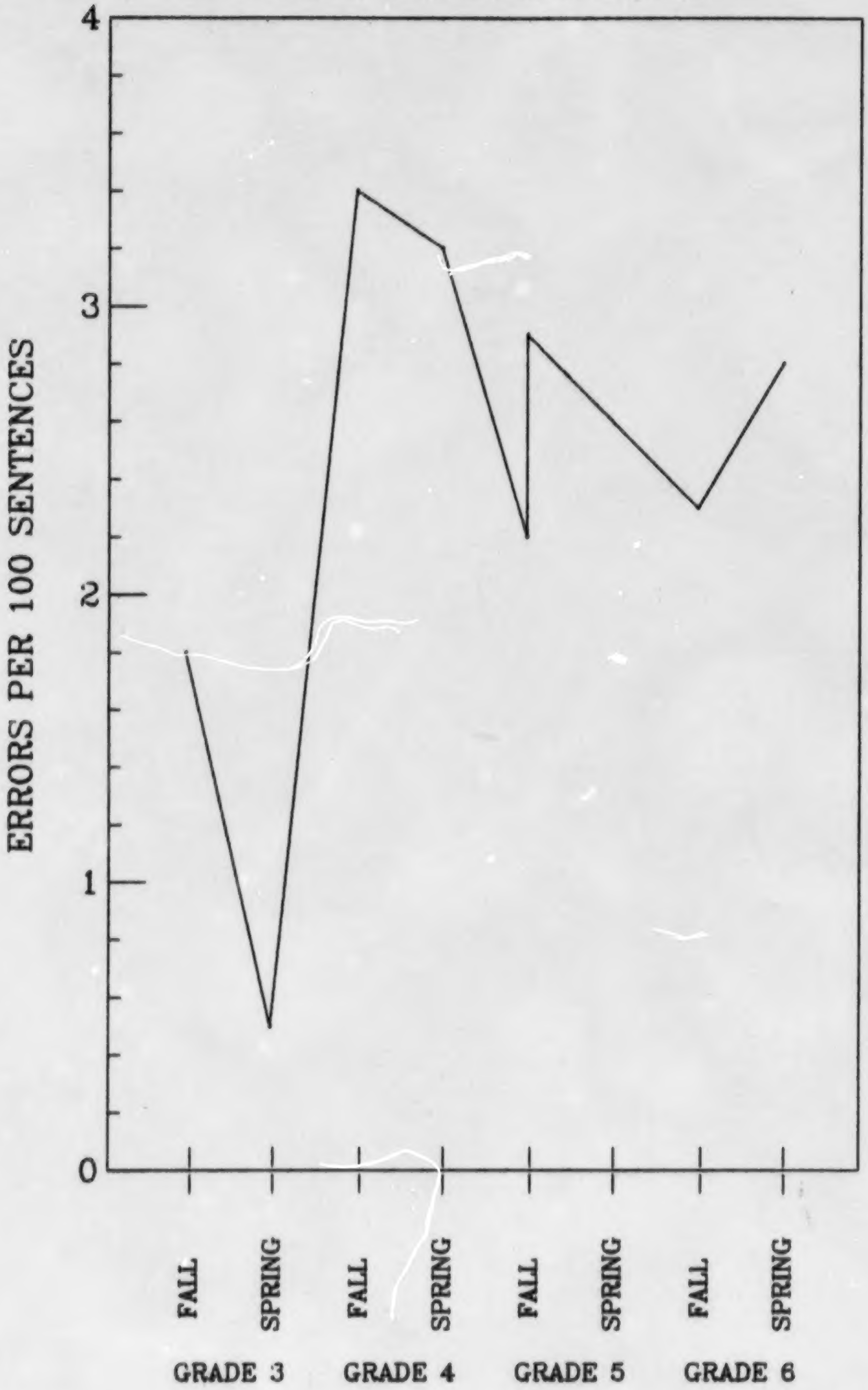
DEVELOPMENTAL PROFILE SCORE

Phrase - Clause Punctuation Error



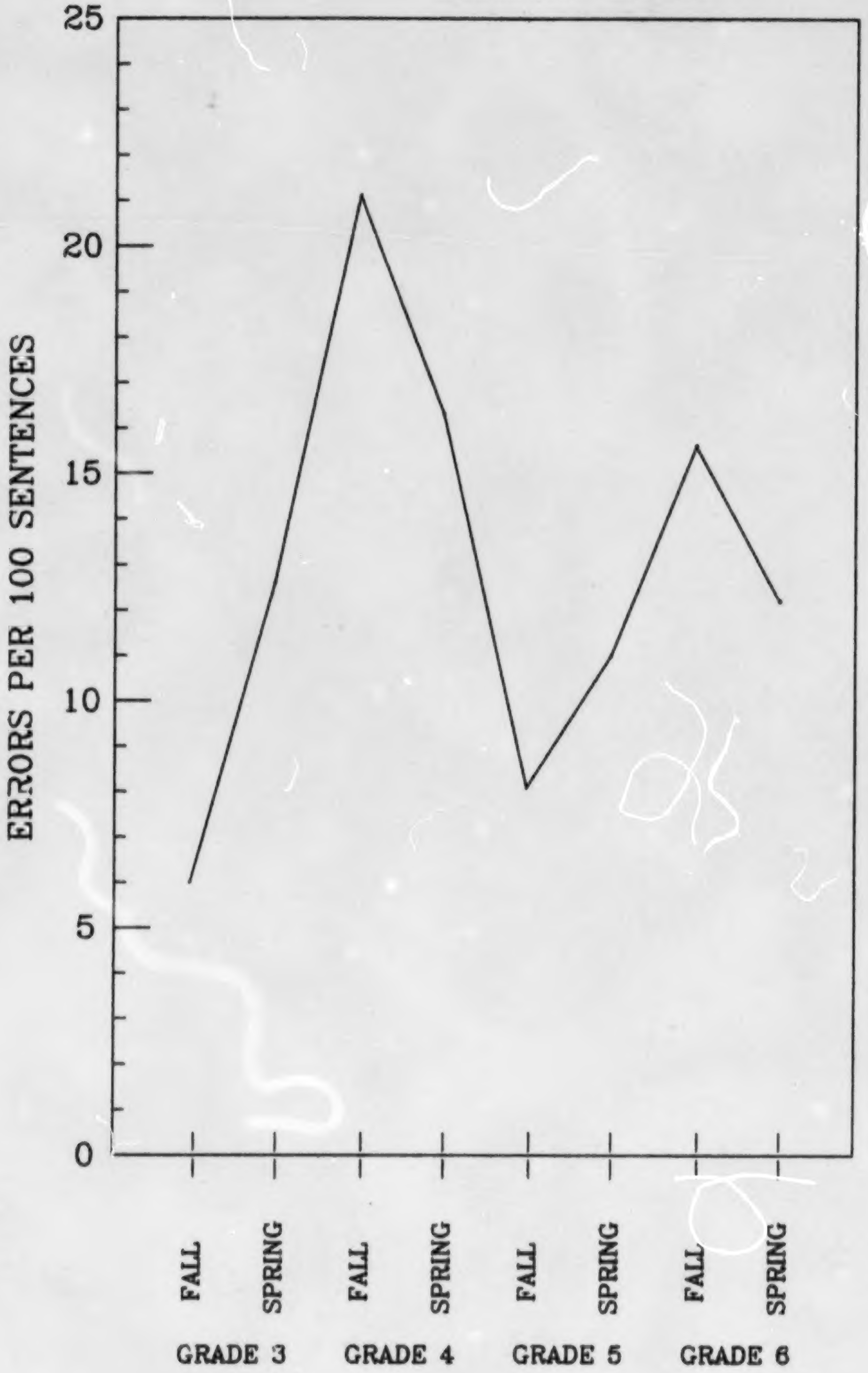
DEVELOPMENTAL PROFILE SCORE

Phrase & Clause Errors



DEVELOPMENTAL PROFILE SCORE

Referent Errors



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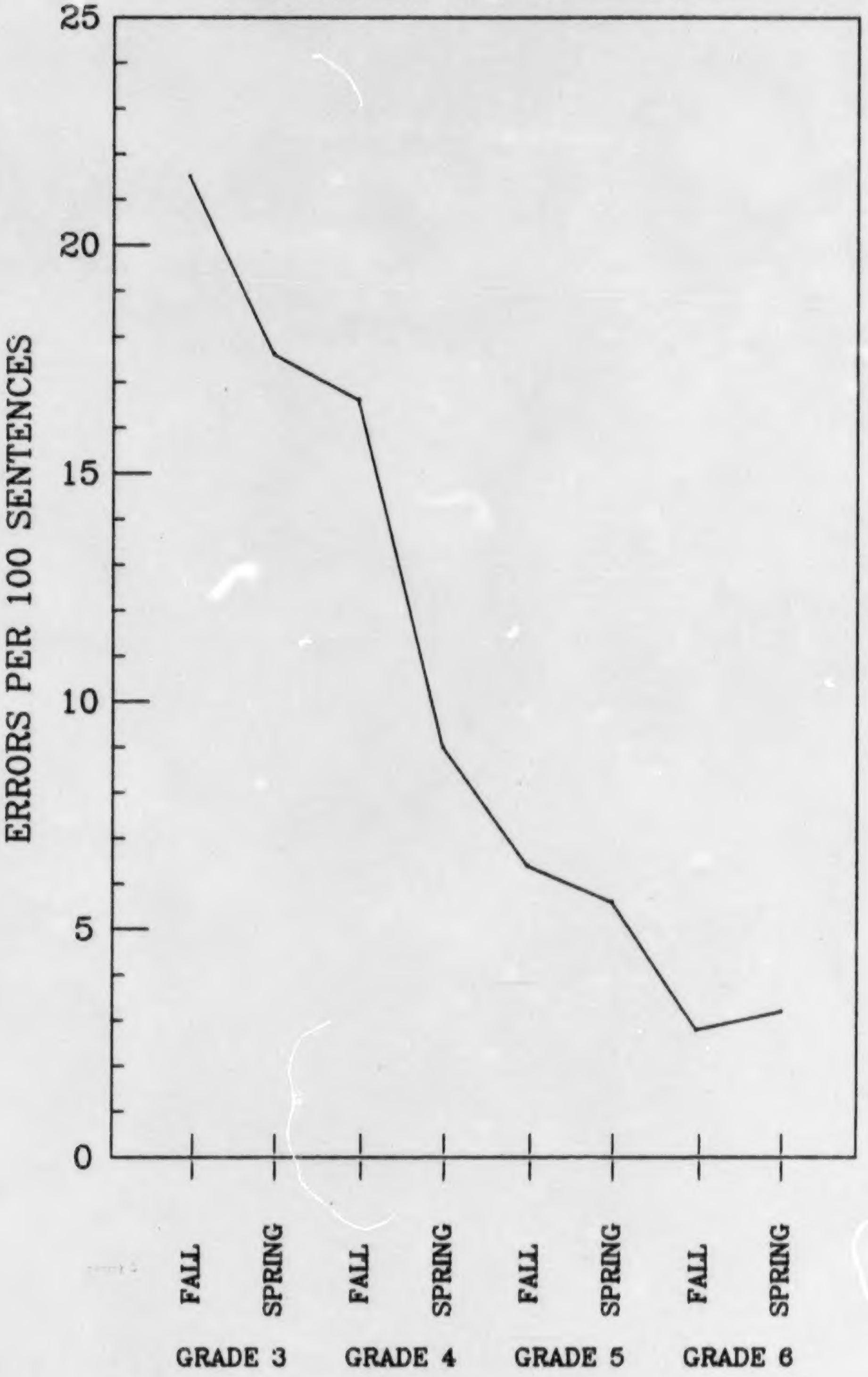
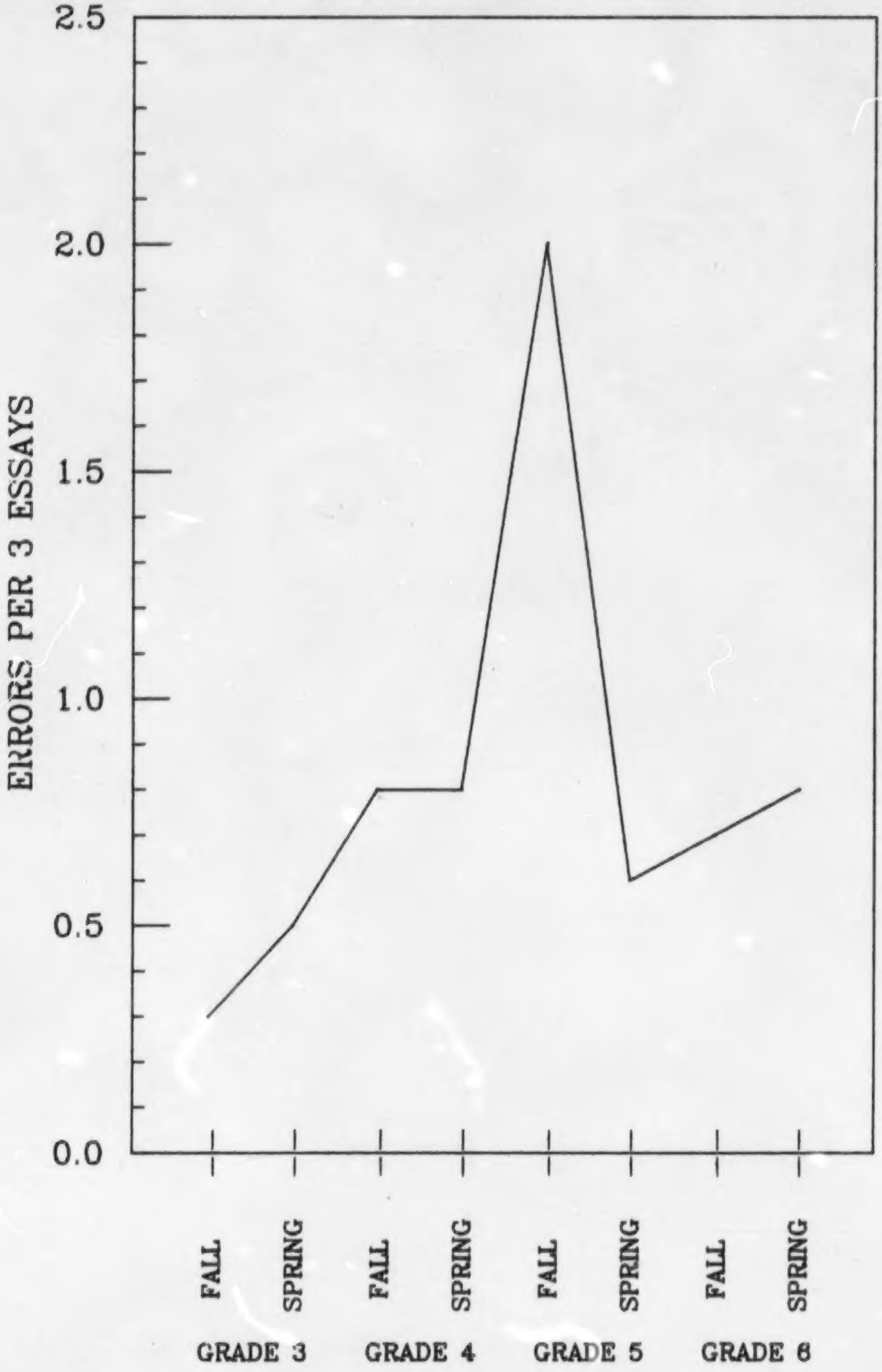
Terminal Punctuation Errors



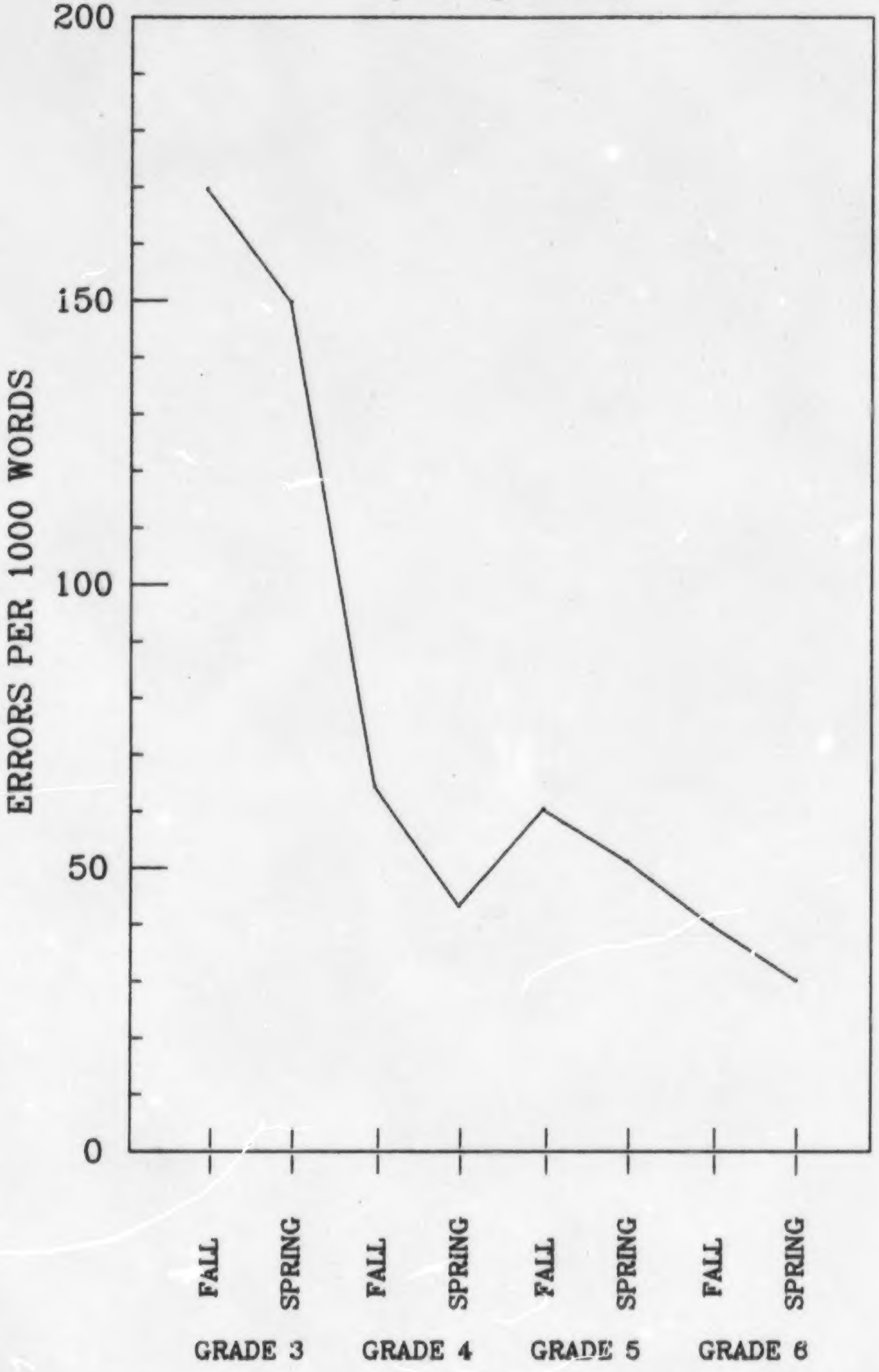
DEVELOPMENTAL PROFILE SCORE

Quotation Mark Errors



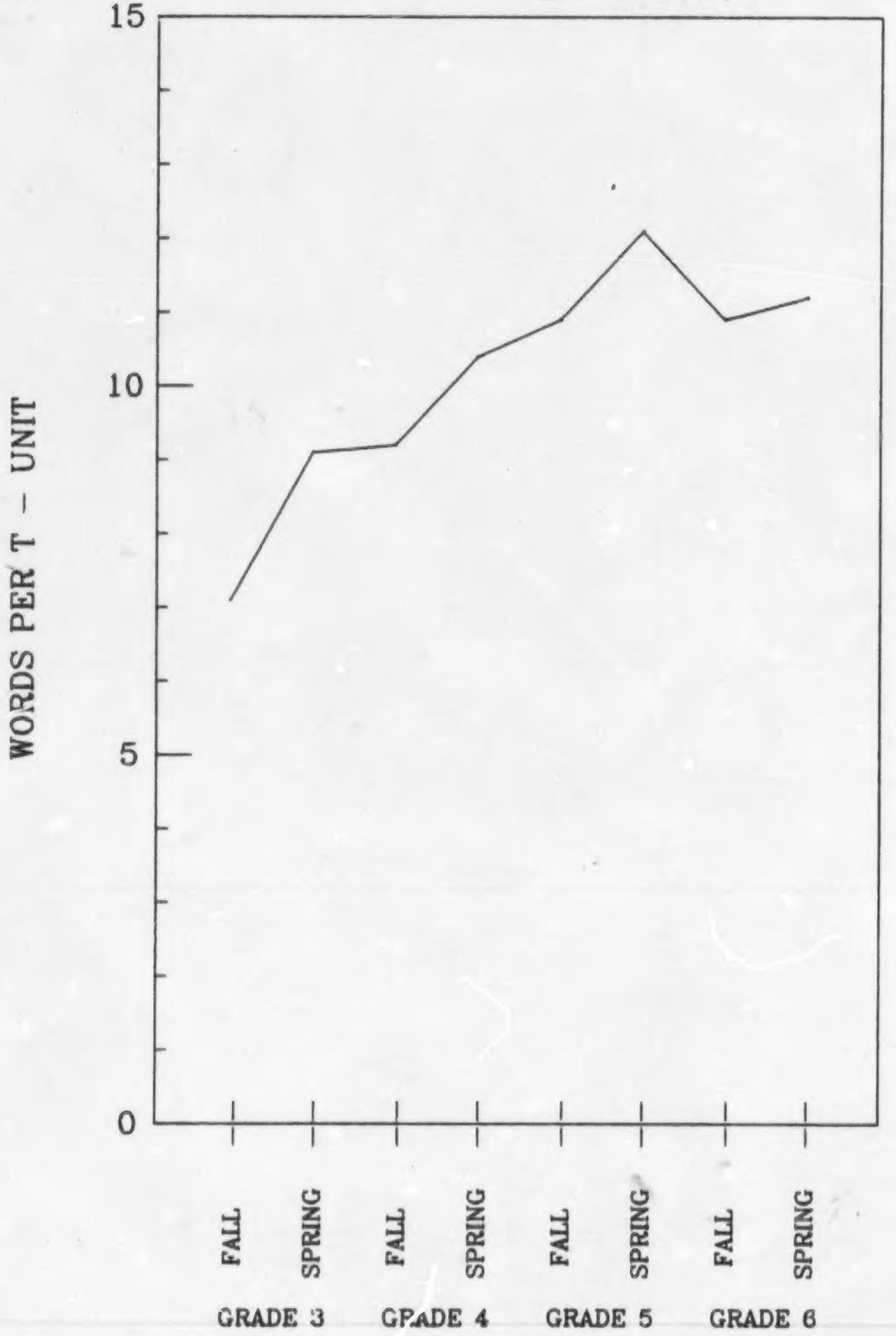
DEVELOPMENTAL PROFILE SCORE

Spelling Errors



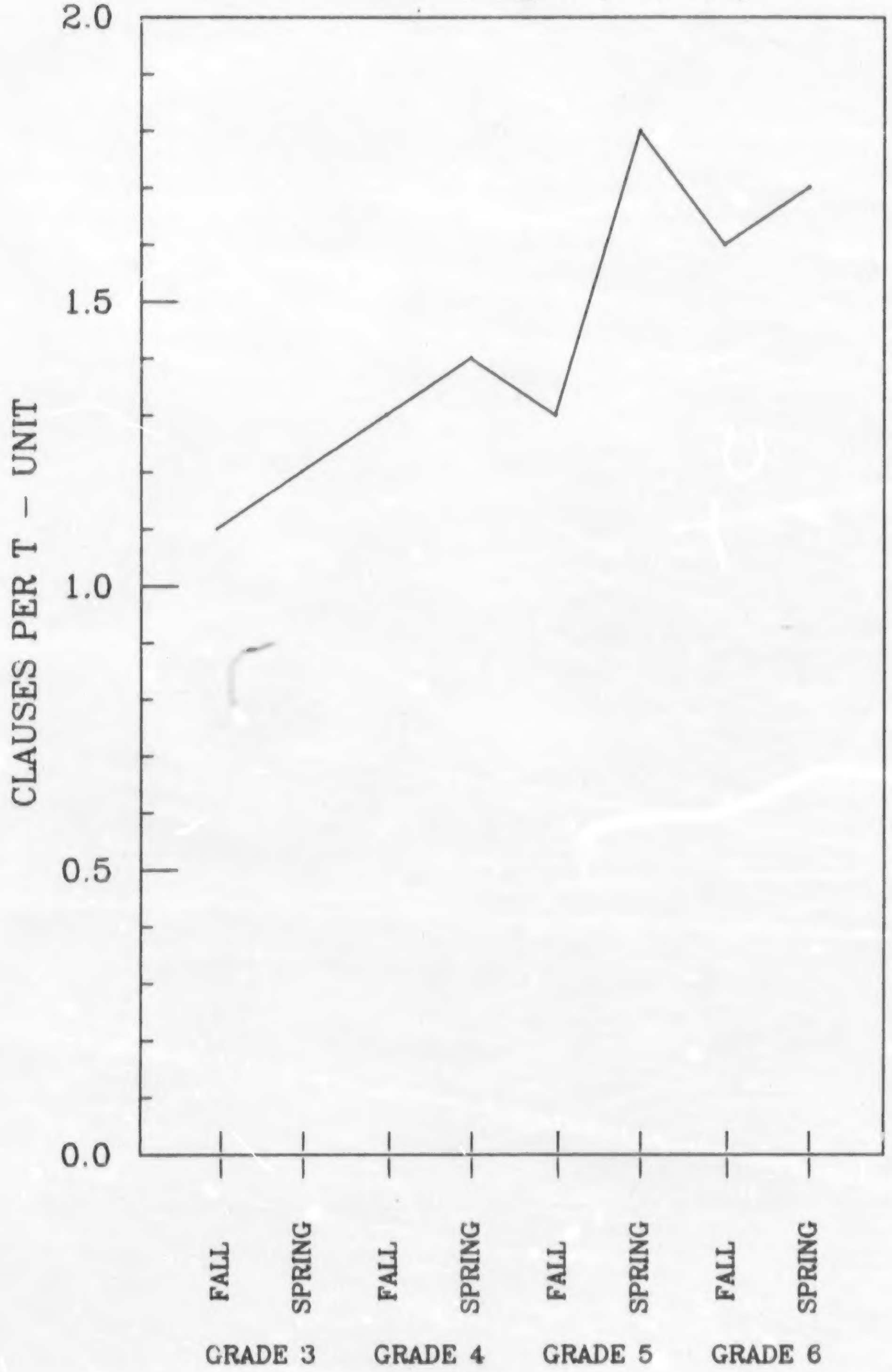
DEVELOPMENTAL PROFILE SCORE

T - Unit Length (Words)



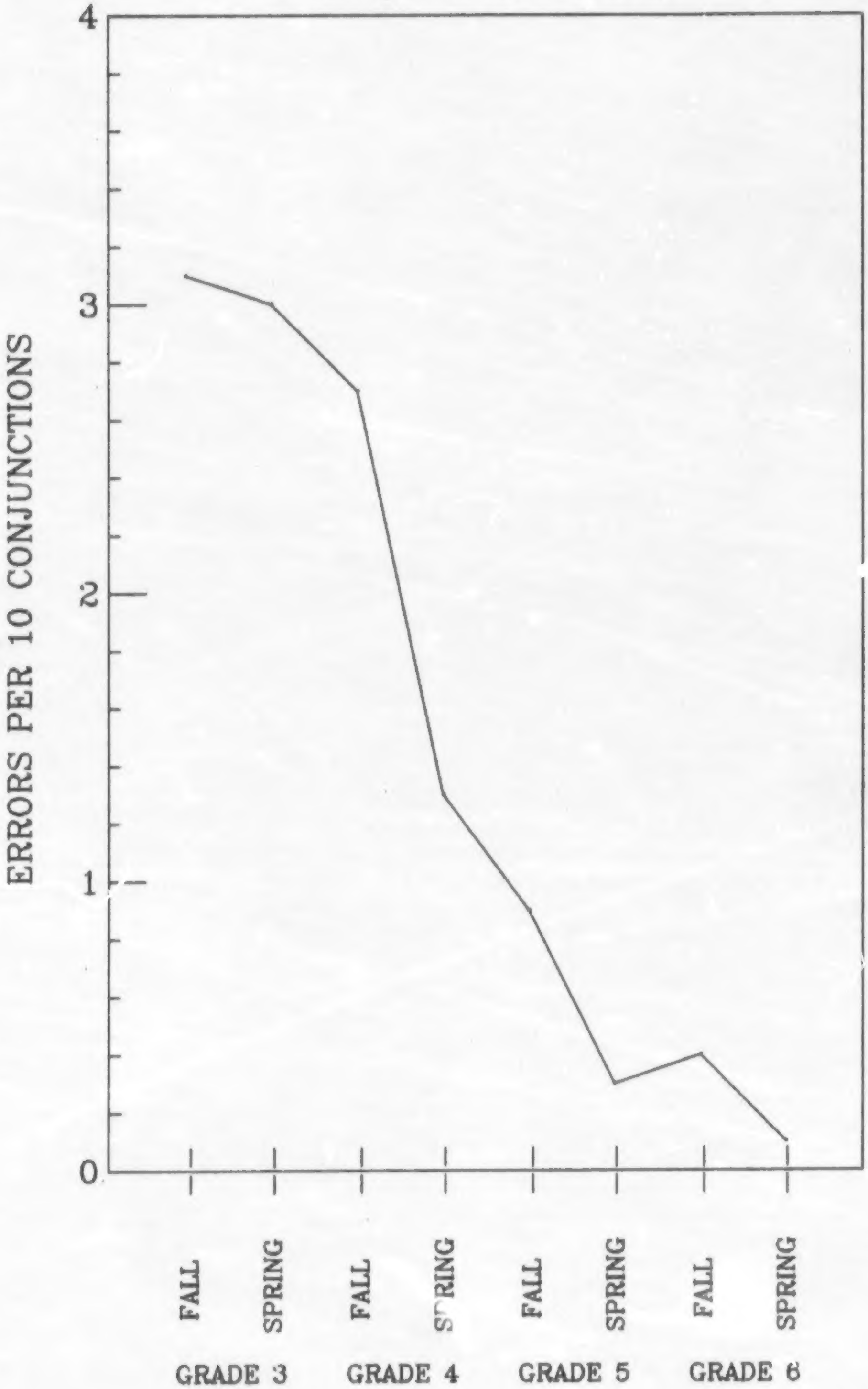
DEVELOPMENTAL PROFILE SCORE

T - Unit Length (Clauses)



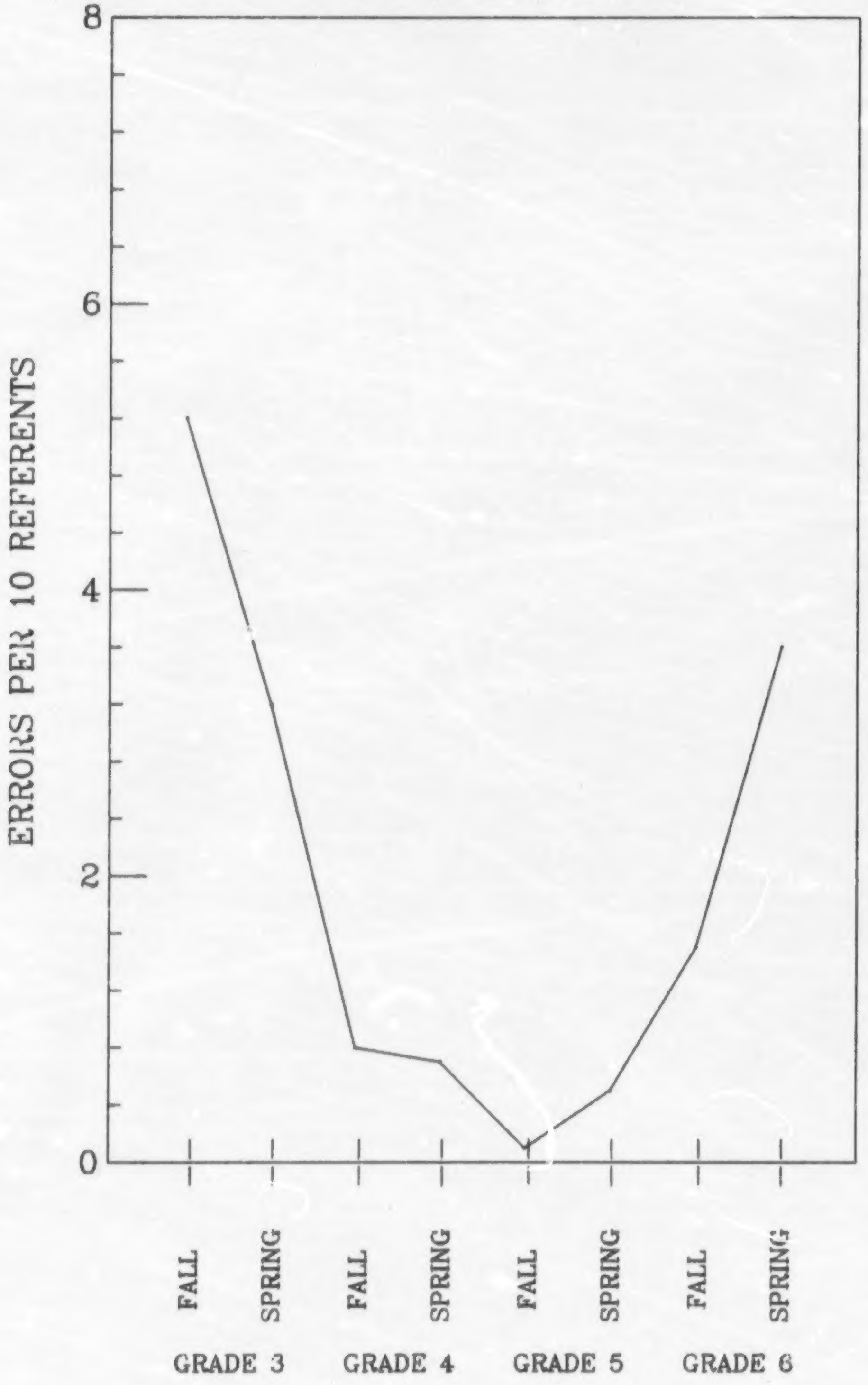
DEVELOPMENTAL PROFILE SCORE

Conjunction Errors



DEVELOPMENTAL PROFILE SCORE

Referent Errors



APPENDIX L

Correspondence Between Instructional Emphasis and Changes in Writing Outcome

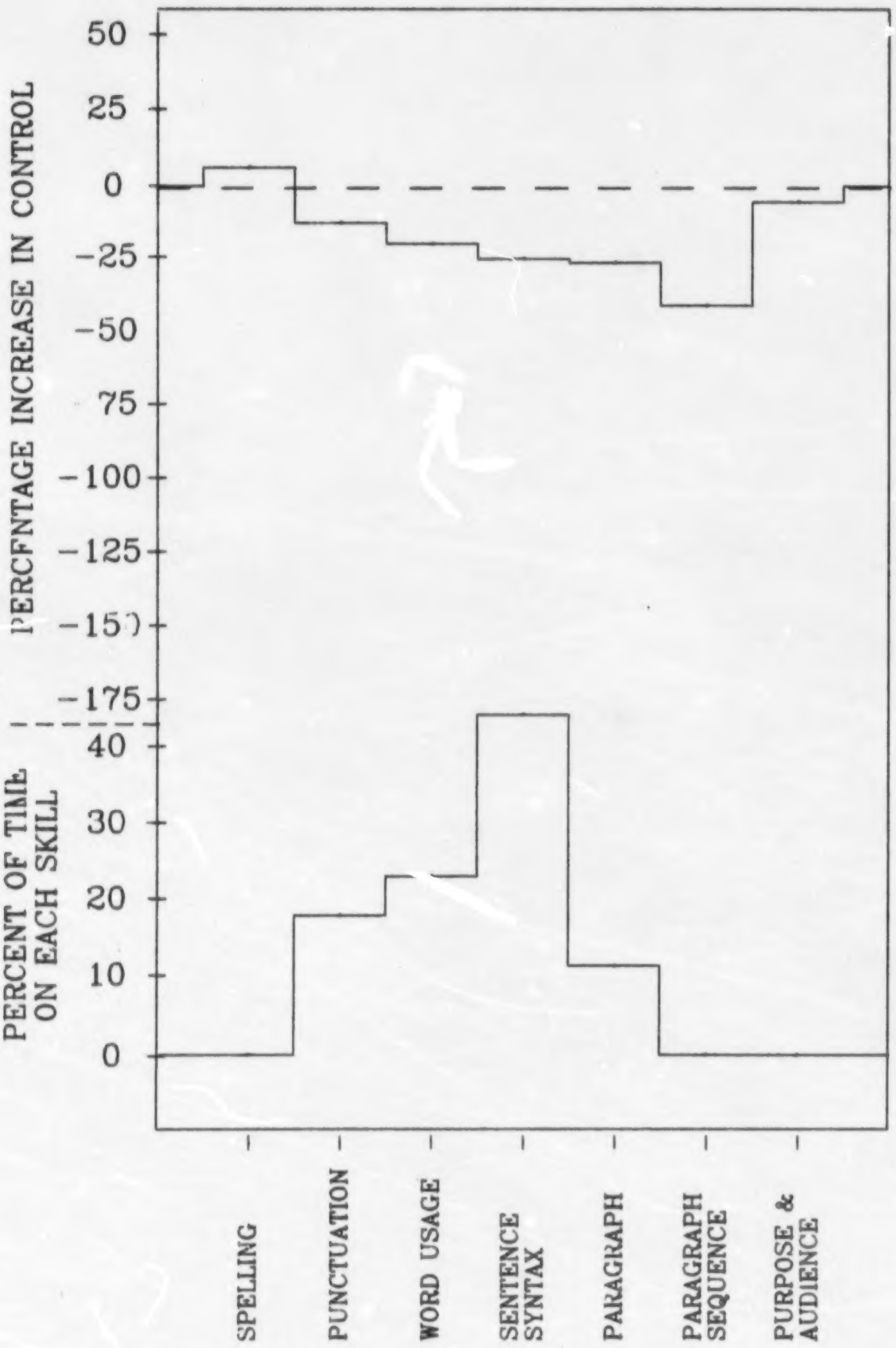
Note: The bottom graph on each page represents the percentage of time the teacher spent on each of seven skills, as reported in the teacher's log of writing activities. The top graph on each page represents the percentage increase in control of those seven skills by students in the class from the Fall to the Spring of the school year. Change in control was computed by the following formula:

$$\text{Change in Control} = \frac{\text{Fall errors} - \text{Spring Errors}}{\text{Fall errors}} \times 100$$

If students made fewer errors in the Spring than the Fall, the percentage is positive (representing increased control). If students made more errors in the Spring than the Fall, the percentage is negative (representing decreased control).

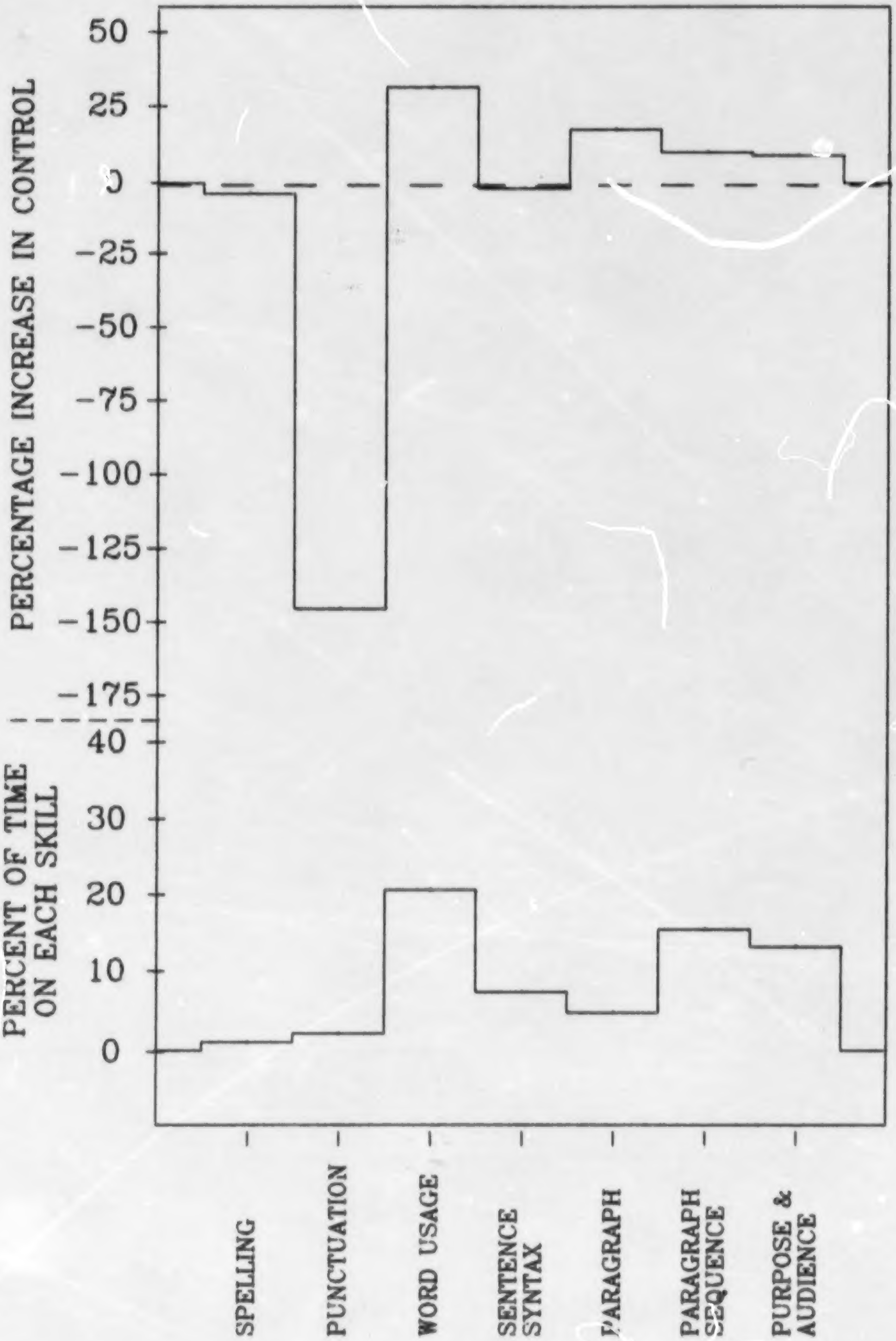
CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME

Teacher A



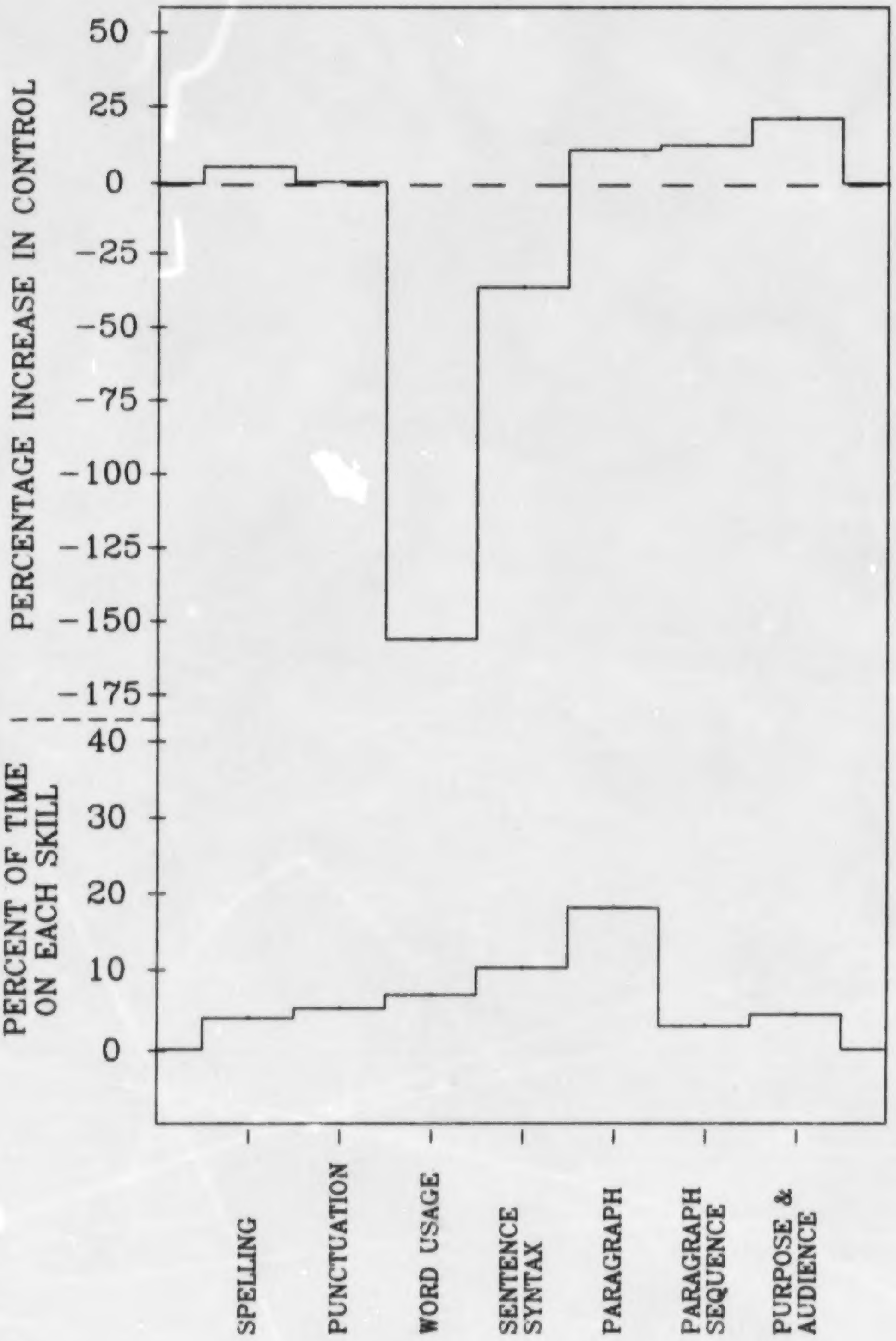
A158

CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME
Teacher B



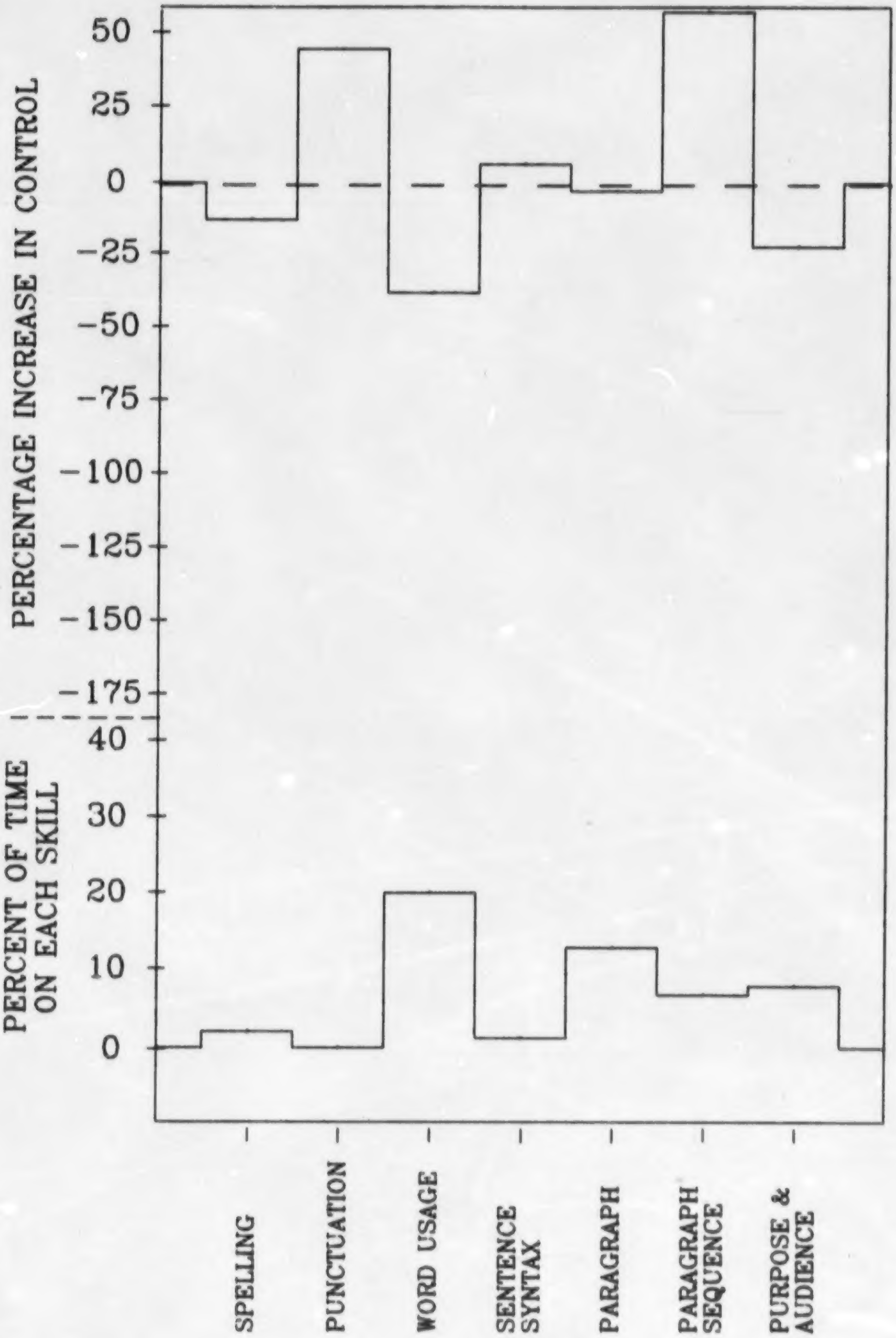
CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME

Teacher C



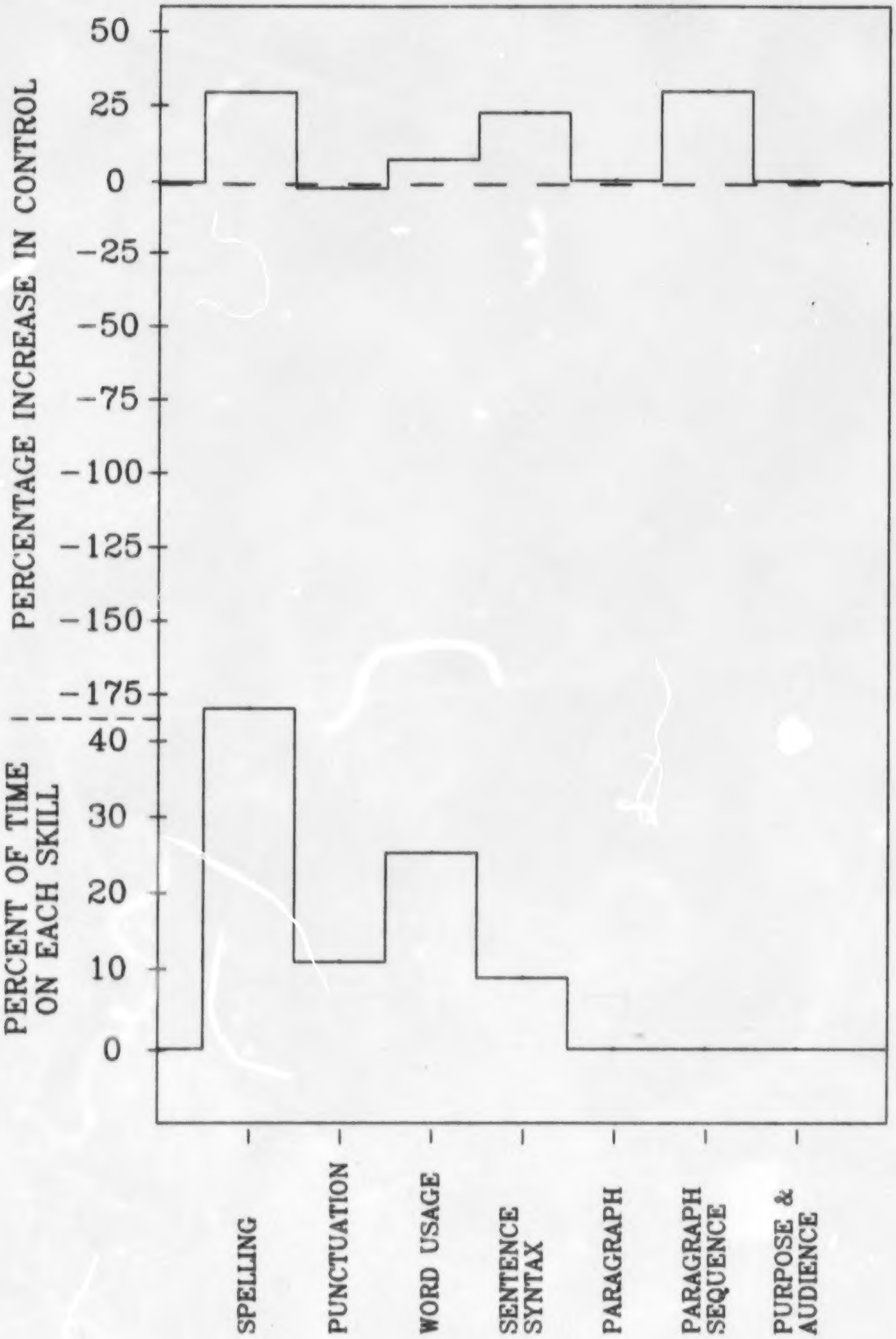
CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME

Teacher D



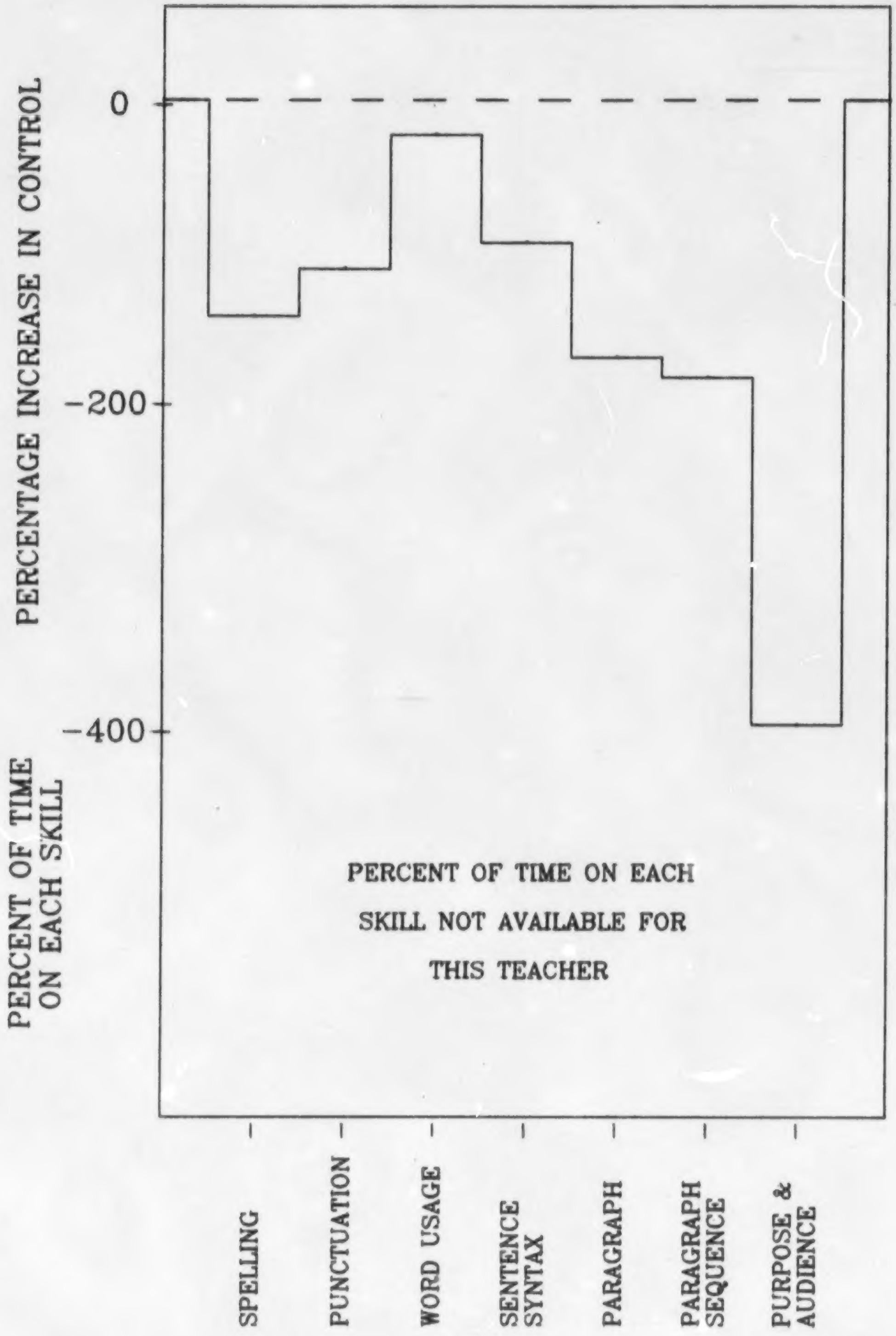
CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME

Teacher E



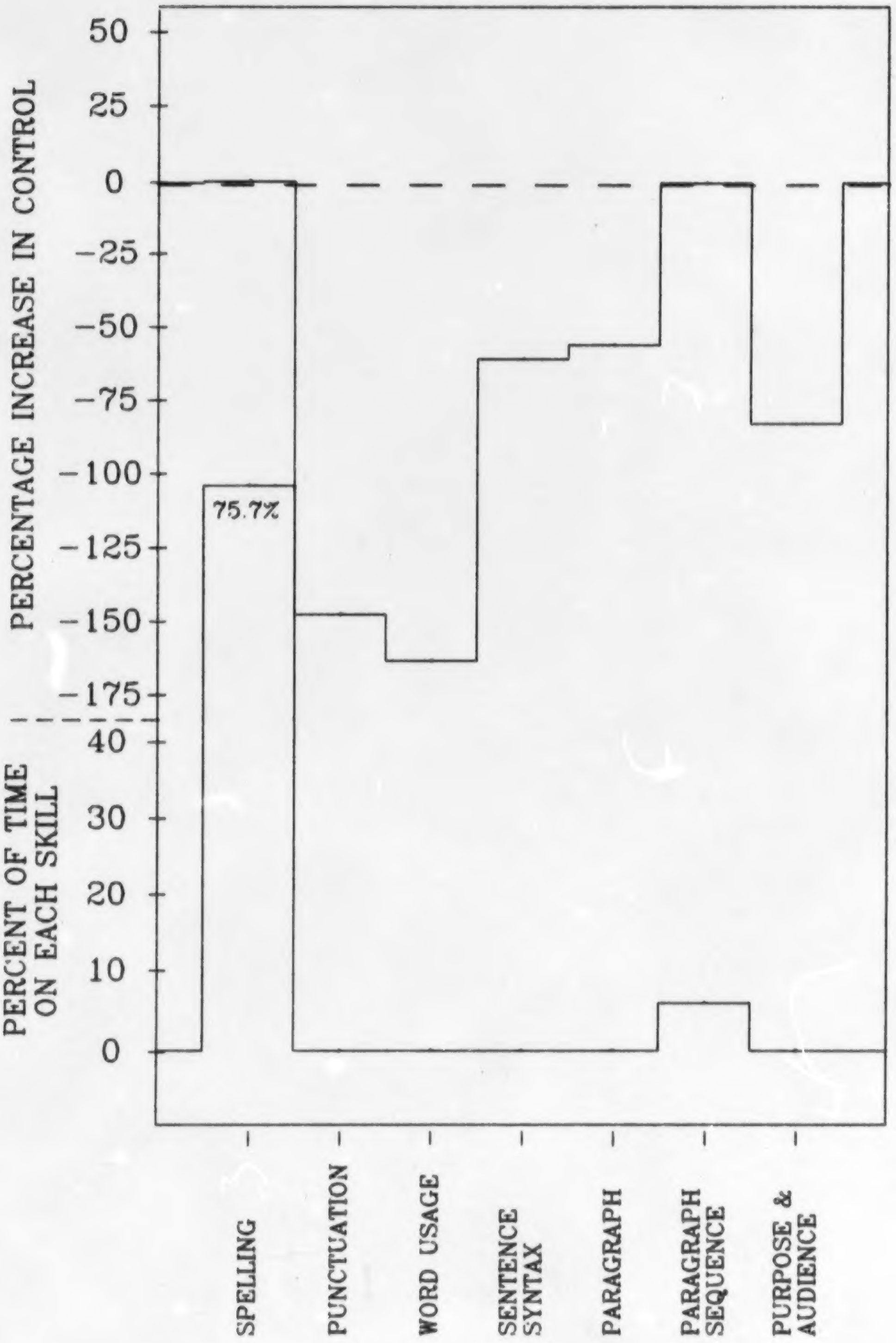
CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME

Teacher F



CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME

Teacher G



CORRESPONDENCE BETWEEN INSTRUCTIONAL EMPHASES AND CHANGES IN WRITING OUTCOME
Teacher H